

# MANUFACTURERS' RECORD.

[Name Patented 1889.]

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER.

VOL. XXIV. No. 17.  
WEEKLY.

BALTIMORE, NOVEMBER 24, 1893.

\$4.00 A YEAR.  
SINGLE COPIES, 10 CENTS.

## The Augusta Exposition.

To undertake a great exposition and to make all the arrangements for it during such a financial stringency as we have lately passed through was an effort worthy of the pluck of any city in America. That the South has the city which, despite the panic and despite the depression in all lines of industry, had the courage and the ability to undertake such a task, is but another illustration of the energy and enterprise of its people. Augusta has not simply built a monument to its own enterprise—it has built one that will attract wide attention to the South at large, because its exposition will prove even as forcibly as the Atlanta Cotton Exposition of twelve years ago did that no task is too great for the people of the South when once they have determined to carry out any plan of development. The great good that the Augusta Exposition will do the South will be its influence in impressing upon the business men of the country the South's solidity and untiring energy even in periods of severest depression. At the opening exercises last week Governor Northen, of Georgia, reviewed the progress of the South, and from his speech we take the following extracts:

"This is an auspicious day, not for Augusta only, but for Georgia and the South. Adopting the language of your president, 'this exposition stands in the same relation to the States at the South as did the Columbian Exposition to the nations of the civilized world.' While, therefore, I congratulate the management of the Georgia State Fair and the management of the Augusta Exposition upon the realization of this hour, I shall not speak of this gathering of products, machines, implements, wares and manufactures either as the Georgia State Fair or as the Augusta Exposition, or as both. I prefer to speak of it as the Exposition of the South.

"As Chicago, vigorous, heroic and young, was the only city on the continent able under the conditions to magnify the one, so Augusta, plucky, public-spirited and progressive, full of new ideas as she is full of new industries, is the only city at the South in these times of panic and depression able to illustrate the possibilities and resources of the other.

"This Exposition of the South is an object-lesson for the diversified industries of her future.

"Today, Mr. President, you have brought us to the dawn of a new industrial era for our section. In all the past the South has been considered the great agricultural section of the Union. In this industry mainly our people have found their employment and their wealth, as much, doubtless, from physical conditions as from choice. These physical conditions have not obtained in other sections. The New England States, with only 25,000,000 acres of arable land, are confined almost exclusively to manufactures for their maintenance. The Middle States, with 65,000,000 acres, more enlarged in agricultural area, are deficient in climate and crops that will pay for their cultivation. The Western States, with 178,000,000 acres, suffer from the intense blizzards of winter, so that with them both the pleasures and profits of agriculture are destroyed. With 398,000,000 acres of

land, 98 per cent. of it available for profitable culture, a climate unsurpassed and marketable products not equalled by all the products of all other sections, it is not a matter of wonder that the South is distinguished as the agricultural section of the Union, and that her people grow rich.

"In 1860 the actual wealth of the South was \$4,801,670,635. She lost more than two billion dollars by the war between the States. All this she recovered, and today she is worth \$4,200,000,000—less than one-half million under the valuation of her property when she owned property in slaves. All this vast accumulation has been mainly gathered by agriculture, based largely upon one market crop—cotton.

"The annual yield from the cotton crop of the South will average \$300,000,000, to which may be added \$27,000,000 for oil, cake and hulls from the seed.

"Upon the fields of the South are also grown \$300,000,000 in corn, \$49,000,000 in wheat, \$35,000,000 in oats, \$36,000,000 in tobacco, \$36,000,000 in sugar and molasses, \$9,000,000 in rice, \$19,000,000 in potatoes, \$25,000,000 in hay and \$185,000,000 in smaller crops, making the entire agricultural yield in the South for the past ten years \$10,608,808,182.

"So vast have been our resources in the fields that we have failed duly to consider the riches in our mines, the wealth in our forests, the great possibilities in our water-powers and in our mills, that would more than double the annual increase of our wealth, and not hinder for a moment the development of our agriculture.

"Why not stop at this golden hour and begin to add to our agriculture the resources of wealth that have lain dormant all these years?

"In view of our apparent neglect, it is a singular fact that the first iron furnace established in the United States was built in the South. Whatever may have been the facts in the beginning, recent investigations have demonstrated beyond doubt the practicability of iron-mining at the South and the relatively low cost of such mining in comparison with other sections of the Union. The report of the commissioner of labor gives the following interesting figures as authoritative and final in favor of manufacture at the South:

"In the Northern States: Three establishments report cost of manufacture of iron as \$20.00 per ton; nineteen report cost as from \$15.00 to \$18.77 per ton; forty-eight report cost as from \$12.00 to \$14.98 per ton.

"In the Southern States: Twenty establishments report cost from \$8.55 to \$12.50 per ton.

"A recent report gives the difference as being much more in favor of the South.

"This fact has given an impetus to iron manufacture at the South, and the industry has advanced 480 per centum in its product in two years. The total product of the South in 1889 was 1,115,252 tons, being about 16 per cent. of the United States total. The product in 1890 was 1,640,416 tons, being about 22 per centum of the total for the United States.

"The most notable feature in the growth of the manufacture of pig iron in this country during the past decade is the development in the blast-furnace industry at the South. In 1870 the wages paid in

this industry was \$1,412,219, and the value of the output was \$5,355,049; in 1880 the wages paid was \$1,856,887, and the value of the output was \$6,246,732; in 1890 the wages were \$12,803,439, and the value of the output was \$31,168,266.

"When this immense amount of raw material is diverted from the markets of the world and manufactured at the South into machinery, agricultural implements and vehicles, we will add greatly to the growing wealth of this section. Tell me, you men of progress, who must make the future for the South, why not add this wealth of manufactures to the agricultural wealth of the South? Let us believe that the South, now having demonstrated that she can manufacture iron cheaper than any other section of the Union, will soon embark upon all lines of manufacture into which it enters and add to her wealth in these growing industries.

"Not to go more fully into details, it is interesting to note the growth of the mineral product of the South for the last decade.

"The South mined in precious metals during 1880, \$260,170; in 1890, \$887,560; lead, copper and tin in 1880, \$467,771; in 1890, \$918,250; coal, 1880, \$2,593,736; 1890, \$15,426,015; iron ore, 1880, \$631,704; 1890, \$3,449,530; quarries, 1880, \$764,179; 1890, \$5,263,320; minor metals, 1880, \$226,170; 1890, \$1,037,630; phosphates, 1880, \$2,200,000; 1890, \$5,218,000—aggregating, 1880, \$7,143,730; 1890, \$32,079,157. This shows an increase of more than 400 per centum in the mineral product of the South in a decade.

"Vast as are the resources found in her mines, the South has an equal, if not greater, wealth in the timber of her forests. We have not yet begun to utilize our advantages in the abundant and cheap supply of wood available for all purposes for which wood may be used in manufactures. The forest area of the Southern States amounts to 211,375,000 acres; the area for the entire United States amounts to 417,132,000 acres. The percentage of Southern lands that are wooded is 41.7; the percentage of lands wooded for the entire United States is 20.4. As stated, the South has 41 per centum of her lands in forests; all the other sections of the Union combined have only 13.6 per centum. The Southern forests are yielding in lumber alone an annual income of \$150,000,000—about half of our cotton crop. It is estimated that these same forests can be made to yield \$350,000,000 annually without impairing their permanent value. If cared for under a judicious forestry system as is practiced in other countries, the annual and permanent yield would be enormous in our money profit.

"As with iron, let me ask, why not begin now to add to our wealth by utilizing our valuable forests not simply in the lumber yield, but in the larger benefits that are to come from its manufacture into vehicles, furniture, implements and other articles of value demanded by our people and by our neighbors?

"I stop again to commend the management of this Exposition of the South not so much for this magnificent display of agricultural products—the largest, I am told, ever put on exhibition at the South—but more for this object-lesson in Southern manufacture. The one does not hinder,

but develops and advances the other. We cannot accept the conditions just presented in the increased wealth of our section made by manufactures and doubt for a moment the greatness of our future in the further development of these industries. Whatever may be the future of the South along the line of manufacture just discussed, she is permanently rich, if she is true to herself, in the growth and manufacture of her cotton. The South need never have a successful rival in the cultivation of cotton. The recent war brought into existence a number of competitors while we were shut off from the world's markets. The most formidable were India, Egypt, Turkey, Greece, Italy, Africa, the East Indies, Peru and Brazil. The general condition of these countries gave some promise of danger to the Southern States. India, Egypt and Brazil produced something more than 2,000,000 bales. But when peace was declared the South came easily to the front again and claimed and secured the markets of the world for her cotton crop.

"The points to be guarded are the expense incurred in its culture and the price received for its sale. Into the first enters two considerations—the methods of culture and harvesting, together with the extent of the area tilled. The more we use machines and reduce the area the greater will be the yield and profit in its culture.

"It will be interesting to note the crop value in different years as compared with the amount of product put upon the market. During the season of 1879-80 the South produced 5,767,252 bales, valued at \$313,696,452; in 1880-81, 6,805,750 bales, valued at \$256,524,911; in 1881-82, 5,456,048 bales, valued at \$394,928,744; in 1882-83, 6,949,756 bales, valued at \$327,938,137; in 1883-84, 5,713,250 bales, valued at \$288,803,102; in 1884-85, 5,706,165 bales, valued at \$287,253,972; in 1885-86, 6,575,691 bales, valued at \$313,723,080; in 1886-87, 6,505,087 bales, valued at \$298,504,215; in 1887-88, 7,046,823 bales, valued at \$356,433,633; in 1888-89, 6,938,200 bales, valued at \$299,408,703; in 1889-90, 7,311,322 bales, valued at \$325,146,970, and in 1890-91, 8,652,591 bales, valued at \$367,735,380.

"With 8,500,000 bales grown in the season of 1890-91 we received only \$54,000,000 more than we did for the 5,500,000 grown in the season of 1880-81, or about \$14.00 a bale for the excess of production. This is a fact that should be considered by the farmers of the South. These figures should furnish sufficient reason for reducing the area crop, and thereby lessening the cost of production.

"The relative advantages in cotton manufacture as compared with other sections are in favor of the South. The Southern mill can buy raw material directly from the farm before it has been pressed or damaged by long transportation and careless handling. The Southern mill can avail itself of the best samples, having full opportunity for selection. The Southern mill is comparatively free from freight charges and has the additional advantage of cheap labor. Water-power is more abundant and coal just as cheap as in other sections. An evidence of these advantages is found in the great increase in cotton manufacture at the South in the past few years. In 1870 we had 452,600 spindles; in 1891, 1,972,397. In



1870 we had a capital of \$9,272,200; in 1891, \$40,675,870. In 1870 we consumed 134,000 bales; in 1891, 603,133. In 1870 we had product valued at \$7,914,617; in 1891, \$55,789,803.

"The past history of the manufacture of cotton determines its future almost wholly for these States. With cheap material, cheap labor and no strikes, the South can claim the entire control of the manufacture of cotton goods at no distant day. Nothing but ourselves can hinder the growth of our section and the wealth of our people.

"We do not need to cultivate one farm less, but more, while we invite capital to develop our mines, utilize our forests, manufacture our cotton, broaden our agriculture and open our ports to the commerce of the world.

"The South is not without proper and sufficient means of transportation. What would avail our resources without markets? The progress just recounted could not have been made without abundant and cheap transportation. In 1880 the South had 19,572 miles of railway; in 1890 she had constructed 43,473 miles, an increase of 120 per centum. In 1880 the gross earnings of Southern railways were \$47,455,975; in 1890 the Southern roads earned \$154,682,773. In 1880 the net earnings were \$17,319,223; in 1890, \$46,385,437.

"The South is by no means without water transportation. Our States are abundantly supplied with interior waterways. Our rivers are generally larger than the rivers of the North—the Mississippi and its tributaries, the Alabama, the Savannah, the James and others. In addition to its long coast line, accessible to the largest ocean vessels, the South has 62,351 miles of inland transportation in its railroads and waterways.

"It may be asked, what of the financial force and credit of the South?

"The people of the South, in common with those of all sections, have just suffered the effects of a severe and unexampled panic. The causes that produced it have been variously stated, and the remedies for relief have been as distinct and contrary. It is my candid judgment that no one factor acted with equal power to break the force of the stringency as the cotton crop of the South. More than the repeal of the Sherman law, for it had not been repealed; more than the assurance of the United States Congress, for the assurance of Congress had not been given; more than any other one factor, and possibly more than all others combined, the cotton crop of the South, put upon the market at the proper time, saved the States from disaster and the people from bankruptcy.

"So much for the South as a financial factor.

"What of her credit?

"In 1887 there were 9230 failures in the United States, only 1709 being in the South; in 1888 there were 9747 failures, 1895 being in the South; in 1889 there were 11,023, 1730 in the South; in 1890 there were 9842, 1467 in the South; in 1891 there were 11,620 in the United States, only 2158 being in the South. During the recent panic 549 banks failed in the United States, of which number there was only eighty-four in the South, with 394 at the West. This is a most creditable showing for our section as a factor in finance in the general government.

"The South under the diversification of crops and diversification of industries is thrilling with new life. As this new prosperity comes to us it will bring no sweeter thought than that it adds not only to the comfort and happiness of our section, but it makes broader the glory and deeper the majesty and more enduring the strength of the Union of States.

In this republic of ours is lodged the hope of free government on earth. Here God has rested the ark of the covenant with the sons of men. Let us soar above

all provincial pride and find our deeper aspirations in gathering the fullest sheaves into the harvest and standing the staunchest and most devoted of its sons as it lights the path and make clear the way through which all the people of this earth shall come in God's appointed time."

#### The South's Condition and Position.

By Thomas P. Grady.

If a man is getting a salary of \$1000 a year and has that salary suddenly reduced by 25 per cent., he will have a hard time of it until he has accommodated his line of living to the reduced basis. If, after a year or so of pinching, his pay be put back to the original thousand, he will feel richer and be richer than before it was reduced. Having learned how to live on \$750, he will be able to save for investment the increase.

In the autumn of 1891 the South had this sort of experience, brought about by the fall in the price of cotton. There was no chance for the farmers to borrow, because it took all the money the banks had to carry the cotton factors who had advanced to borrowing planters more money on their cotton than the cotton could be sold for when brought to market. The wholesale grocers refused to sell corn and meat on credit. The farmers or planters had no alternative but to do what they had been saying for years they were going to do, but never did, namely, to raise their own corn and hogs. To do this required the practice of the most rigid economy. It was an ordeal such as no section of this country ever passed through. It was even a worse one than had to be met after the surrender in 1865. The rest of the country was having flush times while the South was starving. But a stalwart people can stand a good deal of starving and still survive. In fact, to starve a while is good for the health sometimes. At all events, the people of the South were never in better condition than right now.

Having gone through the crisis and adapted themselves to the results of low cotton, the recent panic found them ready "with their lamps trimmed and burning." They owed no debts, had corn in the crib, meat in the smokehouse and cotton in the fields worth two cents more than two years before. By the time low silver had made all the rest of the country sick the South had got well from the illness produced by low cotton.

Meantime, while all this was going on, certain sections were recovering from the effects of a "busted boom." That boom taught the people the foolishness of speculation in far-away town lots and turned their attention to the importance of home industries. A large part of the \$300,000,000 or thereabout which will come into the South from the sale of this year's cotton crop will go into mills and factories right at home. There will be more of it spent for machinery and engines than has been spent by the South for that sort of thing since 1889, and the beauty of it all will be that machinery bought this coming year by the South will be paid for.

It is said by some that the South, for the sake of its democracy, will submit to the prostration of its industries which will result from the rumored tariff changes proposed in the Wilson bill. The people of the South will be good democrats so long as democracy means local self-government and a chance to develop resources. Let democracy threaten either of these, and the South ceases to be democratic. I think Senator Morgan was wrong on the silver question, but having fought the democratic administration on that point, it has opened the way for a fight against the ruin of Alabama's great iron industries. Senator Daniel is well aware what "free" coal would cost Virginia. In plain English, I do not believe that the South

will stand any tariff legislation that will cripple the South's industrial growth. If that be treason, then I can only say to my fellow-democrats, "make the most of it." The voters of the South are, most of them, of the same way of thinking.

#### Cotton Manufacturing at Fall River in 1893.

Notwithstanding the unfavorable business conditions which have prevailed during the past six or seven months, the results of the operations of the cotton-manufacturing establishments at Fall River for 1893 are quite satisfactory. In our annual cotton-crop report, published September 9, we gave a compilation showing the amount distributed to shareholders during the twelve months ended July 31, 1893, but now we are able to prepare our usual statements covering the fourth quarter, including, therefore, all the dividends that fall within the year ending with December.

There is a manifest disinclination on the part of the management of many of the mills to make public the details of their operations, and in consequence it is impossible for us to give any extended table showing earnings. We have, nevertheless, been able to compile a statement embracing eleven of the corporations, and it will be seen therefrom that the net earnings for the past year have been \$1,424,349, against \$1,185,167 in 1892; in 1891 net earnings were \$569,068 and in 1890 they reached \$942,611. It will thus be seen that the aggregate financial returns in at least these eleven mills have been much better than in any of the three preceding years. The capitalization of the companies referred to above is \$7,980,000, and it is therefore apparent that the ratio of earnings to capital was in 1893 over 17½ per cent., whereas in the previous year it reached but 16½ per cent., in 1891 it was only 8 per cent. and in 1890 it was 12½ per cent. It is, consequently, probable that on the basis of these figures a continuation throughout the year of the favorable conditions which prevailed during the early part of it would have made 1893 about as satisfactory to the cotton manufacturers at Fall River as any year in its history. As it is, the results are certainly much better than the course of affairs latterly would have caused anyone to expect.

Considering now the matter of dividends, we find that thirty-six corporations, representing a capital of \$21,458,000, have distributed a total of \$409,420 during the last quarter of the year, or an average return to the shareholders of 1.91 per cent.; but it is evident, from the known conditions of business in recent months, that this distribution has been made to some extent from previous surplus rather than from earnings in the period covered. In the corresponding quarter of 1892 the amount paid out averaged 2.48 per cent.

Combining the above results with those for the nine months (published in the *Chronicle* of August 12), we have the following exhibit for the full year: It will be seen that thirty-six establishments with an aggregate capital of \$21,458,000 have returned to shareholders \$1,706,310 in 1893, or an average of 7.95 per cent., against \$1,492,260, or 7.52 per cent., in 1892.—New York *Chronicle*.

#### Developing Mobile Trade.

Still another steamship line is being talked of for Mobile. It is reported that Macheca Bros., of New Orleans, are having a vessel built on the Clyde river, in Scotland, which will ply between Tampa, Fla., Mobile and Honduras in the interest of the Louisiana Lottery Co., which has transferred its headquarters, as is well known, from New Orleans to Honduras. Tampa will probably be the principal port for express and passenger business, while it is expected to bring cargoes of fruit, dyestuffs and fancy woods to Mobile.

#### Ramie as a Forage Plant.

By C. B. Warrand.

While everybody's attention has been more or less called to the quality of ramie as a fibre producer, other better and by far more valuable qualities have been entirely ignored or overlooked, namely, the quality of ramie as a forage plant, especially in the tropical or semi-tropical locations where clover and timothy cannot be grown.

Nothing will surpass ramie as a fodder plant, especially on the coast lands of the Carolinas, Georgia, Florida, Alabama and Louisiana, where there is an abundance of rich alluvial lands which are at times subject to overflow. I have planted for years small patches of ramie only as an experiment. I found that it could be cut every four or five weeks, being then higher than the best clover, which means six or seven cuttings between March and November. For fibre ramie has to stand nine to ten weeks, until the stems have a reddish appearance and until the lower leaves turn yellow and drop off, which is generally the case when ramie has grown to the height of three or four feet. For forage it is best to cut the same when it is about two feet. It can be cut with a common mowing machine and makes an excellent hay, which is much relished by horses and cattle. It requires some little care in curing, so as to avoid shedding the leaves, which are very tender. After a day's sunning, evenings and early mornings are the best times to handle the ramie hay, as the air is more or less damp and the leaves are not wasted.

A fair acre of ramie will produce at a cutting at least one ton of hay, so that five or six tons of hay would be a common crop per acre. On alluvial lands with irrigation, such as can be obtained in rice fields, much more will be produced, and if we take into consideration that ramie requires no cultivation, as it can stand water for days without injury and is only retarded in its growth by droughts, its valuable qualities, which are unequaled by any other forage plant, will readily be conceded. A field planted once in ramie will yield consecutive crops for twenty years, while one or two years' close pasturing and plowing will entirely destroy it. The ramie forms a small tuber which sends out a shoot in early spring; if nipped by frost, several shoots will come where one was frosted. As soon as these shoots are ripe, which is easily ascertained by the lower leaves dropping off and the stems turning red, the shoots can be cut off and laid like sweet-potato vines. Each eye will send out a shoot and produce a tuber. If these shoots are laid right and left and covered by earth, either with a hoe or plow, the space between the rows will be filled up in one season, and a well-set field of ramie will be the result.

After the first year ramie requires no cultivation whatever, as it will conquer the worst grasses and weeds with ease, and as the ramie is mowed every four or five weeks, nothing will have a chance to go to seed. An acre of ramie is estimated to produce about 400 bushels of small tubers, which are greatly relished by hogs. If from November to February a ramie field is lightly stocked with hogs and then smoothly plowed and harrowed the field will be in better condition than it was before. Heavy stocking with hogs should be avoided, as enough tubers must be kept for seeding. Hogs fatten well on ramie roots.

The yield of ramie stems per acre will not exceed 3000 pounds. Five per cent. of this weight is fibre, or about 150 pounds, which can be bought in China already peeled off for eighteen or twenty cents per pound; hence at the best not more than \$30.00 per acre could be expected, even if suitable machinery were available. As a forage plant it will easily yield five tons of hay per acre, worth at least \$15.00 per ton, or a yield of \$75.00 per acre, without cultivation.



## GENERAL NOTES.

## Brief Mention of Various Matters of Current Interest.

A BILL annexing the suburb of West End to Atlanta, Ga., has been signed by the governor of Georgia.

THE people of Magnolia, Miss., have decided to start what is to be known as the Magnolia College Library.

THE new charter for the city of Macon, Ga., has been approved by the State legislature and has become a law.

ACCORDING to a Winston (N. C.) exchange, over \$300,000 have been spent in the erection of new buildings this year.

THE Covington Iron Co., at Covington, Va., is now stocking up with ore and will probably put its furnace in blast about the first of the year.

THE Maryland Steel Co., of Sparrow's Point, Md., is constructing eight canal-lock gates for the government. They are to be used on the Columbia river, Oregon, and each gate will be ninety feet wide.

A CHICAGO syndicate is locating a French colony of about 100 families on tracts of land of ten to twenty acres at Rockport, Aransas county, Texas. The settlers will engage in cultivating the grape for wine-making.

THE Ashland Coal & Iron Railway Co. has put in blast one of its two furnaces at Ashland, Ky., after an idleness of three months. About 300 men will be employed at the furnace and mines. The other furnace will go into blast next month.

THE National Tobacco Manufacturers and Buyers' Association which assembled at Louisville elected the following officers: N. Finzer, Louisville, president; M. C. Wetmore, St. Louis, vice-president; F. R. Toewater, Louisville, secretary and treasurer.

MR. THOMAS G. BOGGS, of Memphis, reports that many letters are being received from all parts of the country from manufacturers who contemplate moving South. The capital represented by the concerns with which he is now in correspondence is said to aggregate \$3,000,000.

SOUTHERN cotton factors are interested in the opening of the Manchester (England) ship canal, as it is calculated that shipments made all the way by water will cost 6s. 8d. per ton less than by exporting to Liverpool and forwarding to Manchester by rail. This decrease in freight charges would amount to about \$1.67 per ton.

ATTORNEY-GENERAL STOCKTON, of the State of New Jersey, has brought suit against the American Tobacco Co. on the charge that it has violated the State law regarding trusts. The principal argument seems to be that the company has no factory or office in New Jersey, which the statute requires of all bodies incorporated in the State.

THE 60-foot dam across the Colorado river at Austin, Texas, backs water thirty miles up the river. The valley is very narrow, but the soil is exceedingly rich, and as the water supply will be practically unlimited for irrigation purposes, all this land will be irrigated soon, and several parties owning farms on the river are now figuring on floats.

OPERATIONS have been resumed at the Elm Grove coal mines, near Wheeling, W. Va., the differences with the miners having been satisfactorily settled. A slight reduction was made in pay, but the miners still receive as much as is paid in other

mines of the Wheeling section—seventy cents per ton. These mines had been idle for three months, and they give employment to 300 men.

THE sisal-hemp plant is attracting considerable attention in some parts of Florida, especially in the vicinity of Fort Meade. A shipment of the leaves has recently been made to Paterson, N. J., where the fibre will be extracted and a comparison made with that produced in Yucatan and the Bahamas. It is believed that the cultivation of this plant will increase considerably in Florida in the future.

A SAVANNAH dispatch states that the Turpentine Operators' General Association has gone out of existence. It was organized in March, 1892, and has had an important effect in maintaining prices and in curtailing the production to a profitable amount annually. The question of production of late has caused a difference of opinion among the members, which led to the dissolution of the body.

THE *News*, of Charlotte, N. C., reports that Messrs. A. French and John M. Patterson, iron manufacturers, of Pittsburgh, are prospecting through North Carolina with a view to building large iron works. They will visit the old iron field in Lincoln county, and will also look about Bessemer City. The mine at Blakburg will be inspected with a view to purchasing it. Messrs. French and Patterson manufactured all the car springs that the Pullman Car Co. used for several years.

HON. S. B. ALEXANDER has returned to Charlotte, N. C., from his trip to the sugar-beet sections of the West. The result of Mr. Alexander's observations is that a number of counties in North Carolina cannot only equal, but even surpass Nebraska in raising beets, and he is confident that the German syndicate now looking for Southern locations for beet-growing and sugar mills will decide upon North Carolina. Mississippi, Georgia and South Carolina are also making efforts to secure favorable consideration as a location for these proposed factories.

THE city of Washington now has 3,560,020 square yards of improved paved streets and only 1,578,228 square yards of unimproved streets. There are on the streets 1,740,527 square yards of sheet asphalt, 540,461 yards of distillate or concrete, 280,000 yards of asphalt block, 585,337 yards of granite block, 308,059 yards of cobble or rubble, 283,056 yards of macadamized carriage way and 3421 square yards of vitrified brick, the latter being from the clay districts of the West, which promises exceeding usefulness in the future street work of the city. The percentage cost of keeping street pavements in repair has largely decreased of late. It is believed there will be a further decrease in the near future.

THOSE interested in the project for the retention of the glass industry in Wheeling, W. Va., held another meeting at the Chamber of Commerce on Monday last. The committee which had been canvassing the business men in the interest of the project stated that they had met with encouragement that was most satisfactory. In reference to the proposition for the purchase of the United States Glass Co.'s plant, an expert who was present stated that a new factory could be built for less than the amount asked. Another expert agreed with this, and, after much discussion by those present, it was decided to apply for a charter for the new concern and decide later whether old plants should be bought or new ones built. Among the subscribers to stock are George Hook, C. B. Hart, C. Hess & Sons, Fred Albers, C. A. Shaffer, Frank Gruse, Charles Heimiller and many others.

## Three Big Industrial Enterprises at Baltimore.

Contracts for the electric-power plant which, as previously stated, the City & Suburban Railway Co. is to build on O'Donnell's wharf, will, it is claimed, soon be let. The electrical equipment has been contracted for, and the Campbell-Zell Co. will make the battery of boilers. It is intended to build a plant of 5000 horsepower at a cost of \$500,000, but for the present only one-half of it will be constructed. Among the industrial plants of importance now under way at Baltimore there are several worthy of especial mention. The Baltimore Sugar Refinery, which was burned down last May when about to resume operations after expending \$300,000 in additional and improved machinery, is now about to commence rebuilding. Contract will soon follow. The original plant cost over \$1,000,000. Unavoidable delay on account of settlements with the fire underwriters has put off the rebuilding until the present time, but from now on the work will be pushed as rapidly as possible. Mr. W. W. Spence has been elected president of the company to succeed the late William De Ford.

The Maryland Electric Co., which operates the Fort Wayne Electric Co., with Mr. J. Frank Morrison as manager, has announced its plans for the erection of an immense electric plant designed to supply light, heat and power. The plant is to be equipped to give it a power equal to 12,000 horse-power; the Edison system is to be used throughout. It is said that \$2,000,000 is to be invested in the new plant, \$1,000,000 of which will be issued in bonds and the remainder in stock. The General Electric Co. of New York is reported to be back of the whole project, and negotiations for the necessary sites have, it is said, been about completed.

## Board of Trade for Nashville.

The citizens of Nashville realize the great advantages to the community which a business organization can obtain, and have organized a board of trade, which includes a large proportion of the representative merchants of the city. One line of its work is to "build up" the city by increasing its industrial enterprises and adding to its wealth and population by every legitimate means. In this respect it has an excellent example in the city of Memphis. The success of the Young Men's Business League of Memphis in attracting plants from outside has been recently detailed at length in the MANUFACTURERS' RECORD.

The officers of the Nashville body are: A. J. Harris, president; Joseph H. Thompson, first vice-president; B. Herman, second vice-president, and W. D. Gale, treasurer. The following constitute the board of directors: G. P. Thruston, William F. Orr, J. B. Morgan, F. T. Cummins, John J. McCann, W. L. Granbery, A. J. Harris, Joseph H. Thompson, B. Herman, Edward Buford, W. M. Casetty, James B. Richardson, W. A. Wray, D. S. Williams and W. K. Phillips.

## Mobile's Banana Trade.

The tropical-fruit trade is rapidly increasing at Mobile. The banana dealers especially recognize the advantages that port possesses, and claim that cargoes can be imported and distributed at Mobile at more of a profit than at New Orleans. The Mobile & Ohio Railway Co. is making special efforts to secure the fruit shipments to the North and West by maintaining a fast-freight service and offering other inducements to the dealers. According to a large importer, the following differences in money and time are in favor of Mobile when compared with New Orleans: Wharfage, twenty cents per ton; quarantine fees during season, \$20.00; coal, \$1.00 per ton; discharging, one cent per bunch; harbor master's fees, \$20.00;

pilot fees, \$3.50 per draught boat; time to Chicago, twelve hours. It is estimated that from \$400 to \$500 can be saved on an average-sized cargo by unloading at Mobile, saying nothing of the time saved.

## More Steamships for the South.

Reports from various cities indicate that the coasting trade and business with Europe and the gulf islands and Central America is rapidly increasing. An English company has decided to start a line of ships from Honduras to New Orleans, and has had Alfred H. Alchion, an engineer, to make surveys of the harbor at the mouth of the Ulua river and the river itself. The harbor is considered an excellent one, and vessels can be loaded at that point with the dyewood, fruit, cocoa and other products of the country. It is expected to put two ships in service at the start.

Miller, Meletta & Co., of New Orleans, have started a line of vessels between that city and London and Antwerp, stopping at Porto Rico and Havana en route. Three steamships have been built purposely, and the first has arrived at New Orleans.

As reported elsewhere in this issue, two tank steamers are being built to carry cottonseed oil from New Orleans to Rotterdam.

The Merchants' Steamship Co., of Jacksonville, has begun a weekly service to New York especially for the orange trade. The fruiter Elihu Thompson has been secured for the business, in connection with the John G. Christopher. The cargoes will include about 18,000 boxes of oranges each trip.

The Jacksonville-Philadelphia line has chartered another vessel for the orange trade, which will insure a trip every five days between these cities.

A dispatch from Topeka, Kans., states that through the efforts of Governor Lewelling and the Danish vice-consul at Kansas City a steamship line between Galveston and Copenhagen is to be started to increase the exports of Kansas and other States by way of the gulf ports. It is stated that Alfred Christensen will start the line of vessels.

## Galveston's Great Bridge Opened.

The great wagon bridge which connects the island on which the city of Galveston, Texas, is located with the mainland has been completed and was formally opened with an elaborate industrial celebration occupying three days.

The project of building a bridge has been agitated over fifty years. It resulted in the construction of a wooden wagon bridge, but several years ago the need of a steel structure was made apparent, and in April, 1892, a contract was made with the Missouri Valley Bridge and Iron Works to construct the bridge for \$185,000. It was to be paid for by issuing 185 \$1000 6 per cent. bonds, which form a lien on the taxable property of the county. These bonds were sold in the North at a premium. Work was begun in November, 1892, and practically completed last October.

## Wants to Invest South.

THE MANUFACTURERS' RECORD has a letter from a young man now engaged in an iron-manufacturing industry in the West who desires to locate in the South, and prefers Virginia. He wishes to buy an interest in an ironworking establishment or to invest \$5000 to \$10,000 in some new enterprise. Letters addressed to "S," care MANUFACTURERS' RECORD, will be forwarded.

MANAGERS of mills, factories, furnaces, mines, etc., and parties starting manufacturing enterprises and needing machinery or supplies of any kind, will find it profitable to consult the advertising columns of the MANUFACTURERS' RECORD. Its pages contain names of the best houses in the country among manufacturers of and dealers in machinery and mill supplies.



## RAILROAD NEWS.

[A complete record of all new railroad building in the South will be found in the Construction Department, on page 294.]

## Railway Annual Meetings.

The annual meeting of the Baltimore & Ohio, held at the company's offices in Baltimore, resulted in the re-election of the directory, which consists of W. F. Burns, George A. Von Lingen, James Sloan, Jr., W. H. Blackford, Aubrey Pearre, George DeB. Keim, Wesley A. Tucker, Maurice Gregg, J. Willcox Brown, W. F. Frick, George C. Jenkins and Charles J. M. Gwinn.

The feature of the meeting was the report of President Charles F. Mayer, which was surprisingly satisfactory. It shows that the gross earnings for the year ending June 30, 1893, were \$26,214,807.25, an increase over the previous year of \$337,449.58. Total expenses were \$19,041,981.85, an increase of \$609,025.88, leaving a decrease in net earnings of \$271,576.30. The net earnings for the year aggregated \$7,172,825.40 from the operation of the several lines.

The increase in operating expenses has been largely due, the report states, to money spent for betterments, improvements to the roadbed, etc., which amounted to \$2,523,025.20, or nearly \$900,000 more than during the previous year. According to the general manager's report, 318 miles of line were reballasted, 9188 yards of masonry were built, thirty-eight bridges and culverts erected and 293 repaired, nearly five miles of sewers laid, ten miles of grading completed for sidings, etc. During the year 11,423 tons of steel rails were laid, of which 11,079 tons weighed eighty-five pounds to the yard; also 818,372 ties were put down. Special improvements to the road include the extensive rock cut and bridge over the Potomac at Harper's Ferry, W. Va., the Baltimore Belt tunnel and the straightening of the Washington branch at Relay, Md. These figures show that a large section of the line has practically been rebuilt.

The percentages of increase shown by the report are as follows: Gross earnings, 1.30 per cent.; operating expenses, 3.30 per cent.; decrease in net earnings, 3.65 per cent.; increase in passenger earnings, 8.05 per cent. (but little of this is World's Fair traffic); increase in tons of freight moved, 3.92 per cent.

The company paid 5 per cent. dividends on its common stock, \$180,000 on its first preferred and \$120,000 on its second preferred stock during the year. New feeders to the system are the West Virginia & Pittsburg, 160 miles, and Fairmont, Morgantown & Pittsburg, sixty-three miles in length.

At the annual meetings of the Richmond & Petersburg and the Petersburg Railway Companies President Scott submitted a report for the year ending June 30, 1893, showing net earnings to be \$146,869.54, an increase of \$20,000 over the year 1891-92. The sum of \$527,141 was received for rents and interest, which, after deducting interest on funded debt and dividends, leaves a surplus of \$45,540.95, an increase of \$17,000 over the previous year.

At the annual meeting of the Richmond, Fredericksburg & Potomac, held in Richmond, the report of President Myers showed net earnings for the year ending June 30, 1893, amounting to \$203,759.62, out of which \$156,660 in dividends, over \$20,000 for new shops and \$7016.25 for real estate were paid, leaving a surplus of \$47,099.62. The only decrease of revenue was from sleeping cars. This was \$825 less than last year.

At the annual meeting of the Valley branch of the Baltimore & Ohio, held at Staunton, Va., the report of President Mayer for the fiscal year showed gross

earnings of \$128,753.24, a decrease of \$20,473.58 from the preceding year. The net earnings were \$1312.55, a decrease of \$20,282.41.

## Opening the Sabine Pass.

Business of the Southern Pacific system promises to be benefitted considerably by the deepening of the channel at Sabine Pass, Texas, so that ocean steamships can cross the bar safely.

A branch road of the Southern Pacific runs from Beaumont down to Sabine Pass and from Beaumont north for some distance into the heart of the lumber regions. Along the line of the branch road is a large number of steam saw and planing mills, some of which are plants of great magnitude. The output of these mills will be greatly increased by the opening up of the Pass, and the road's freight business will consequently be increased. Lumber will be shipped down the branch and loaded on steam and sailing vessels for Cuba and Mexican ports. The lumber people of that part of Texas anticipate a large increase in their shipments to points along the coast of Texas and Mexico and to Cuba. The opening up of the Pass will also result in other mills being built. In addition to the lumber trade there are a number of different kinds of business that will be developed by deep water at Sabine. Petroleum, coal and agricultural interests, hitherto undeveloped because of the inaccessibility of the country to vessels, will be hereafter classed in the freight shipments made from that port.

## A Kentucky Project.

Hon. Thomas F. Hargis, president of the Commonwealth Land & Lumber Co., writes the MANUFACTURERS' RECORD, that bonds have been issued and stock taken for constructing the first section of the Pineville, Mount Pleasant, Elkhorn & Big Stone Gap Railway. This line is projected from Pineville through southeastern Kentucky to Big Stone Gap, Va. At Pineville it would connect with the Louisville & Nashville, and, in fact, parallel that road more or less to Big Stone Gap. The entire distance covered is about seventy-five miles.

In connection with the road it is announced that the Commonwealth Lumber Company has sold all of its land in Kentucky to the North American Coal & Steel Co. and the International Mortgage syndicate, the latter a concern which has been incorporated in Illinois. It is claimed that the North American Coal & Steel Co. has bought about 400,000 acres in Kentucky and Tennessee, and the railroad mentioned is to be built partly to give an outlet to the timber and minerals of this region.

## Wants the Charter Revoked.

Attorney-General Townsend, of South Carolina, in his annual report just published, devotes considerable space to the Port Royal & Augusta Railway. He highly compliments the administration of Receiver Averill, and dwells upon the development of commerce at Port Royal and the increase in the railway business. General Townsend does not favor any interference on the part of the Georgia Central, and recommends that the Port Royal's charter be repealed and the line sold to a new corporation, which will prevent the Central from again obtaining control. The report implies that the Central intends to have Receiver Comer replace Mr. Averill if possible.

## Erlangers Want Their Roads.

Recent developments would seem to indicate that the Erlanger syndicate of Berlin is taking a more active interest in the roads with which it is associated in the South. Among these are the Cincinnati Southern and the Alabama Great Southern.

A Cincinnati dispatch states that the Brice-Thomas party, which has controlled the Cincinnati Southern, has given up the property to the Erlangers. Following this comes the announcement that Alfred Lauterbach, one of the Erlangers' legal advisers, has been elected president of the Alabama Great Southern combination, in place of S. M. Felton, who is of the Brice-Thomas people. The inference is that the Erlangers do not favor the Drexel-Morgan plan of reorganizing the Richmond Terminal system, and have taken the steps noted to withdraw their lines from it.

## Virginia Wants Another Railroad.

The plan of having another railway line, which has been agitated by the citizens of Roanoke, Va., for several years, has developed into something tangible by the formation of what is known as the Roanoke Railway Construction Co., with the following-named officers: President, R. H. Woodrum, of Roanoke; vice-president, J. F. Effinger, of Staunton; secretary and treasurer, J. W. Coon, of Roanoke. Board of directors: James S. Simmons, Lucian H. Cocke, M. A. Rife, R. H. Woodrum and M. H. Claytor, of Roanoke; Mosby H. Payne, of Buchanan; E. Dillon, of Lexington, and J. F. Effinger, of Staunton.

For a long time the business men of Roanoke have desired another railroad to the East and North, and it is proposed by this company to build a line to connect with the Chesapeake & Ohio. There is also some talk of building to connect with the Baltimore & Ohio, but this is probably premature.

## Louisville &amp; Nashville and Port Royal.

Regarding the report that the Louisville & Nashville intends to have a line to the Atlantic seaboard, which was discussed at length in the MANUFACTURERS' RECORD several weeks ago, the following additional facts are of interest: Mr. Scott, the new general manager of the Georgia Railroad, was appointed by the Louisville & Nashville, which is joint lessee of the Georgia with the Georgia Central. This would indicate that the Louisville & Nashville is taking steps to acquire entire control of the Georgia, which, with the Port Royal & Augusta, would form its line to Port Royal. A party of Louisville & Nashville people, which included Directors Marcus and Butler, have recently been over the line of the Port Royal & Augusta, while during the recent meeting of the Southern Railway and Steamship Association at Atlanta several conferences were held, at which officials of the Port Royal & Augusta and Louisville & Nashville were present.

## Trade Excursions to Savannah.

The business men of Savannah have decided to have a series of trade excursions to that city from points on the Savannah, Florida & Western. It is expected to run from two to four excursion trains or more monthly, according to the amount of patronage received. Special arrangements have been made with the Savannah, Florida & Western management by which excursion tickets at reduced rates will be placed on sale at all stations from Gainesville, Fla., to Savannah. A fund has been raised by the Savannah merchants to guarantee the railroad from loss and pay incidental expenses, such as advertising, etc. Other Southern cities might find it profitable to imitate Savannah in this respect.

## To Be Sold at Auction.

The court has ordered the Georgia Southern & Florida road to be sold at foreclosure sale on the first Tuesday in March. The commissioners to conduct the sale are T. B. Gresham, R. A. Nesbit and J. L. Hardeman. The Macon & Birmingham will be sold at the same time.

## Improved Business.

The following random reports show how railroad traffic is improving:

San Antonio, Texas.—W. C. Rigsby, city passenger and ticket agent of the International & Great Northern, reports a heavy tourist travel into San Antonio. Every train brings in a big crowd of winter visitors. The boarding-houses and hotels are already becoming crowded.

Fort Worth, Texas.—The freight business continues rushing, both in and out, and if the present movement keeps up much larger yard accommodations will necessarily have to be provided for by the railways centering in this city. The Rock Island reports a heavy business to the south over the Houston & Texas Central, while the Santa Fe and Missouri, Kansas & Texas report a like business.

Houston, Texas.—The Houston, East & West Texas continues to do a big freight business. In addition to the extra amount of cotton brought in lately, the road is bringing in immense quantities of wood this month. Every car on the road is in active service.

Jacksonville, Fla.—The travel South for the past week from Northern points to Florida has been very heavy. The first cold snap experienced in the North within the last week has had its effect upon the winter visitors South. Last night the Florida passengers numbered about forty. The sleeper was full and many had to take the day coach in self-defence.

## How the Rates Came Down.

When it was decided to open the Augusta Exposition the management requested the several railway companies whose lines entered the city to make special excursion rates for the time being, on the ground that the increase in travel would benefit the companies as much as the fair. All agreed to a reduction except the Richmond & Danville and the other roads entering the city from South Carolina. The merchants of Augusta promptly called a meeting and passed resolutions condemning the action of these lines. The general passenger agents were wired of the result. Within twenty-four hours after the meeting the South Carolina roads granted the reduction, and now the Richmond & Danville has given in by making a rate of one cent per mile one day of each week during the exposition.

## A New Sleeping-Car Line.

A new sleeper service is to be established between New York and New Orleans to compete with the Richmond & Danville line recently instituted. The route is from New York to Bound Brook, N. J., via the Jersey Central, Bound Brook to Philadelphia via the Reading, Philadelphia to Shenandoah Junction via the Baltimore & Ohio, Shenandoah Junction to Bristol, Tenn., via the Norfolk & Western, Bristol to New Orleans via the East Tennessee, Virginia & Georgia. It is calculated to make the run in forty hours. From New York to Washington the Baltimore & Ohio's Royal Blue Line trains will probably be used in the service.

## Railroad Notes.

THE auditing department of the Southern Pacific is to be removed from New Orleans to Houston, Texas.

JOHN W. GREEN, manager of the Georgia Railroad, has resigned his position.

GOVERNOR NORTON, of Georgia, has appointed R. K. Reeves manager of the Northeastern Railway for the State, which endorses \$209,000 of its bonds. The road is leased to the Richmond & Danville, and has defaulted on its interest payments.

ON account of the action of the court, which prevents the Missouri, Kansas & Texas from having its own train service



into Galveston over the Galveston, Houston & Henderson, the Missouri, Kansas & Texas will for the present enter Galveston by an arrangement with the Gulf, Colorado & Santa Fe.

DISPATCHES from the City of Mexico state that Francis H. Woodhouse, of England, has obtained a franchise to build a road from a point on the Mexican Railroad to the Zacatlan Iron Works.

THE Chattanooga Southern will build fifty new cars for hauling coal and ore.

SPECIAL rates will be made by the Wheeling & Lake Erie to all points on its line during the Thanksgiving, Christmas and New Year holidays. All agents of the road will give information.

THE Atlantic Coast Line has improved its train service to Florida by placing an additional sleeper on the train service between New York, Jacksonville and St. Augustine. The increasing travel over this line compelled this addition. The Coast Line has just issued an artistic prospectus containing views of Florida resorts and brief descriptions.

THE Charleston & Savannah management is experimenting with a device termed the Gill-Alexander individual electric call. It is claimed that a train dispatcher can, by means of his telegraph key, make a combination of signs which will ring a bell in any way-station office where the system is placed. It is of special value for arousing station operators who sleep at depots along the road.

THE death of Charles Heth, of the Chesapeake, Ohio & Southwestern road, occurred recently in Memphis. Mr. Heth was one of the best known railroad men in the South, and for a number of years was connected with the Little Rock & Memphis system.

JUDGE MORRIS has denied the application for an injunction to prevent the foreclosure of the mortgage on the Baltimore & Lehigh. The bondholders, it is understood, will bid in the property, as already stated in the MANUFACTURERS' RECORD, and reorganize the company.

It is understood that E. H. R. Green, who, with his mother, virtually owns the Texas Midland, will buy the Waco & Northwestern road, which has been ordered sold to satisfy the bondholders' claims. This would give the Texas Midland an entry into Fort Worth and Houston as well as several other important cities. The Waco & Northwestern is now called the Houston & Texas Central.

ADVICES have been received in Savannah that Justice Jackson has again decided that the Southwestern Railroad of Georgia is liable, with the Macon & Western and Georgia Central, as surety for the tripartite mortgage bonds held by Alexander Brown & Sons, of Baltimore, and others. The first decision was rendered in June last, but the court gave a rehearing of the case in September at Washington.

A DISPATCH from the City of Mexico announces that Chandos Stanhope, of England, and J. Sampson, of Kansas City, Mo., have signed a contract to complete the Tehuantepec Railway, which will connect the isthmus country with Mexico. About thirty-five miles are uncompleted.

THE Charleston (S. C.) court has ordered the South Carolina Railway to be sold at auction April 12, 1894.

THE business men of Fort Worth, Texas, have secured a decision from the Southwestern Traffic Association which removes the differential freight rates against Fort Worth and in favor of Houston and Galveston. It is expected to increase the city's business.

THE Pan-American road, of which a few miles have been built near Victoria, Texas, is advertised to be sold by the sheriff, on December 10, to satisfy contractor's claims,

## FINANCIAL NEWS.

### The Financial Situation.

Increased demand for iron, stimulation of the phosphate industry by the decrease in the royalty, increase in railway traffic, especially in the Southwest and to Florida, and unexpected dividends declared by railroad and other corporations are some of the favorable indications noted in the South this week. Business generally is about the same as last week. Several failures have occurred which were not unexpected. The Ryan Company's troubles at Atlanta were the result of the conduct of individuals and cannot be ascribed to business conditions. The tide of winter travel to Florida promises to be of as much magnitude as last year. The orange crop is moving rapidly, and the outlook is very hopeful in that section. The Tennessee Coal & Iron Co. has received orders for nearly 100,000 tons of iron within a few weeks, which has given a stimulus to the industrial situation in Alabama. The Augusta Exposition continues to draw throngs to that city and is attracting much attention in the North and West.

Funds continue to accumulate in banks throughout the country. It is estimated that the New York banks will have \$75,000,000 surplus reserve by February 1 at the rate deposits are now being made. The banks at present have about \$65,000,000. The distrust of banks which produced the money stringency has been succeeded by a distrust of business ventures, from which recovery is very slow. Factories continue to resume operations, and it is safe to say that a large majority of the plants idle in August are again being operated on full or reduced time. The stock market reflects the situation in London, where the rumors about the Bank of England and the demands for money from the Continent have lessened the desire to buy foreign securities. However, it is noticed that good bonds find a ready market, and that Southern securities of this class are readily sold, and often at a premium.

### Interest and Dividends.

The Bonsack Machine Co., of Lynchburg, Va., has declared a dividend of 2 per cent. on its capital. This is its thirty-third dividend.

The First National Bank of Baltimore has declared a semi-annual dividend of 3 per cent. on its capital.

The Union Trust Co. of St. Louis has declared a dividend of 3 per cent. to stockholders.

The interest coupons of the Cahaba Mining Co., controlled by the Tennessee Coal & Iron Co., due in December, will be paid promptly at maturity.

Stockholders of the Galveston Masonic Temple Co. have received a dividend of fifty cents per share.

### New Financial Institutions.

The governor of Georgia has signed a bill chartering the Commercial Travelers' Bank. It is understood that the bank will be located at Atlanta.

Blackwell & Co. have opened the new bank reported at Jasper, Fla.

The officers of the West Union (W. Va.) Bank are W. B. Maxwell, president; S. B. McMillan, vice-president; P. M. Robinson, cashier. The capital is \$35,000.

Advices from Bluefield, W. Va., state that a bank is being organized under the State laws.

The Fidelity Savings & Loan Co. has been incorporated at St. Louis, Mo., with \$1,000,000 capital. E. M. Sloan and John Boyle are among the incorporators.

It is reported that efforts are to be made to form a new bank at Middlesborough, Ky. The recent suspension of the Coal and Iron Bank is attributed to the hasty action of the

secretary of state. It is claimed the bank would otherwise have gone into voluntary liquidation.

The Capital Life, Accident & Maturity Insurance Co. has been chartered to do business in Washington, D. C., with \$100,000 capital. Dr. B. M. Beall is president, and S. J. Bowen, secretary.

It is reported that a savings bank is to be started at Novelty, Mo., with a capital of \$10,000.

A charter has been granted to the Provident Fire Insurance Co. of Richmond, Va., with \$50,000 capital. Polk Miller is president and treasurer, and D. L. Fry, vice-president.

### New Bond and Stock Issues.

The Maryland Electric Co., of Baltimore, will issue 900 bonds of \$1000 each and 200 bonds of \$500 each, secured by a mortgage on its property and franchises, the bonds to run fifty years at 6 per cent. interest.

The bonds of the Cedartown (Ga.) Land Co., recently issued, are being bought at par. They bear 6 per cent. interest.

The recent issue of bonds made by the city of Buena Vista, Va., to refund its debt, have been sold to Northern people.

The Canton National Bank of Baltimore has decided to increase its capital from \$50,000 to \$100,000.

The Washington National Building and Loan Association has decided to increase its capital from \$2,000,000 to \$40,000,000. The home office is Alexandria, Va.

The city of Meridian, Miss., has voted in favor of issuing \$100,000 of bonds for a sewerage system. The city's population has increased from 4008 to 11,000 in ten years. Its total debt is \$56,000 on a valuation of \$5,000,000. Address Thomas H. Griffin, mayor.

The city of Baltimore has sold \$1,000,000 worth of its 3½ per cent. bonds to the Mercantile Trust & Safe Deposit Co. of that city at par. During the scarcity of money city securities of 1900, bearing 5 per cent. interest, were offered below par. This gives an idea of the improvement in financial matters in the city.

### Failures and Suspensions.

Weiss & Goldstein, of Greenville, Miss., merchants, have assigned. The liabilities are estimated at \$300,000.

W. P. Campbell & Bro., of Augusta, Ark., have assigned. Liabilities are estimated at \$35,000 and assets at \$50,000.

William C. Holland has been appointed receiver of the Lone Star Elevator Co., which owns elevators at Dallas, Iowa Park, Vernon, Harold and Quanah, Texas. Arbuckle Bros., of New York, hold a \$100,000 mortgage on the property.

The Ryan Co., of Atlanta, Ga., which has dealt largely in dry goods, has gone into the hands of a receiver. Its capital is \$100,000. The liabilities are estimated at \$180,000 and assets at \$310,000.

Greil & Kohn, dry goods dealers at Selma, Ala., have made an assignment to H. S. D. Malory. Poor collections are reported to be the cause of the failure. Liabilities are estimated at \$70,000.

The Kentucky Malting Co., of Louisville, has made an assignment to the Germania Trust Co. Assets are estimated at \$300,000 and liabilities at \$170,000.

E. D. Huguenin, of Macon, Ga., president of the Cumberland Island Co., has been appointed receiver of the company. It owns the Cumberland Hotel, a resort off the Georgia coast.

The Knoxville Brewing Co., of Knoxville, Tenn., has made an assignment to H. S. Mizner. Liabilities are estimated at \$225,000 and assets at \$135,000.

A. A. Hopkins, of Harriman, Tenn., and W. H. Russell, of Chattanooga, have been appointed receivers of the East Tennessee Land Co., of Harriman. The company owns a number of lots in Harriman and a tract of mineral land in its vicinity.

## OPINIONS OF THE DAY.

### What Various Authorities Think of the Business Situation.

Hambleton & Co.: "Nothing, in our opinion, will contribute more to the restoration of confidence and to the improvement of values than the reorganization of the large railways now in receivers' hands. The business of our local stock exchange and the interests of our local investors have been most seriously affected by the defaults consequent upon the troubles of the Richmond & Danville Co. and by the delay in its reorganization, and nothing will more favorably affect trading here than the readjustment of the securities of the Danville and its divisional roads. We can readily understand why such reorganizations should have been delayed, but now that money is abundant, it would appear likely that there will be no trouble in collecting assessments on shares and in obtaining the necessary funds to underwrite the reorganization."

Bradstreet's: "Banking authorities at New York do not view the present situation with satisfaction. Relief from the tension of the struggle over the silver repeal came, it is claimed, too late to revive winter trade, while next sea on's business is too far off to affect the money market. Limited demands and a continued accumulation of funds seem to be regarded as the only prospect."

American Banker: "A slow evolution into better times seems now inevitable. The run on the banks, the hiding away of currency, the enforced contraction of credit, the disorganizing of laborers into the augmenting ranks of the unemployed and the dread of the future have accomplished whatever evil lay within them."

### The Plans Reported Abandoned.

According to a New York dispatch, the plans for reorganizing the Pennsylvania Steel Co. by issuing consolidated mortgage bonds has been abandoned. The Maryland Steel Co. was to be included in the plan of reorganization. Just how far the failure to reorganize the parent corporation will affect the latter's affairs cannot be determined at this time.

### Financial Notes.

THE Valley Bank of Virginia, located at Shendun, Va., has determined to discontinue business after December 1.

ARRANGEMENTS are being made to reopen the Exchange and Deposit Bank of Abingdon, Va., by making an agreement to pay depositors ninety-three cents on the dollar.

DIRECTORS of the Bank of Tazewell and the Clinch Valley Bank, both of Tazewell, Va., have decided to consolidate the institutions under the name of the "Bank of Clinch Valley" with a capital stock of about \$200,000.

CITIZENS of Jacksonville, Fla., are agitating the question of issuing \$100,000 in bonds to pay for a sewerage system and other proposed improvements.

JAMES H. RAYMOND & Co., of Austin, Texas, have secured a controlling interest in the stock of the First National Bank and will conduct it in future.

### Business Chances.

James P. Chase, Florence, S. C., offers for sale an electric-light plant and ice-making plant. They are located in excellent quarters and can be operated economically and to the best advantage. The present company has exceptional advantages in regard to franchise and patronage. The purchaser will have an opportunity to furnish power for operating city water works. The plants for sale are now leased at a rental of 15 per cent.



## Manufacturers' Record.

PUBLISHED EVERY FRIDAY BY THE  
Manufacturers' Record Publishing Co.  
MANUFACTURERS' RECORD BUILDING,  
Lexington and North Streets,  
BALTIMORE.

EDWARD H. SANBORN, Managing Editor.

NEW ENGLAND OFFICE—503 Exchange  
Building, Boston.  
S. I. CARPENTER, Manager.

NEW YORK OFFICE—39 and 41 Cortlandt St.  
Room 90.  
H. W. NEWTON, Manager.

PHILADELPHIA OFFICE—504 Walnut St.  
J. VIENNOT, Manager.

CHICAGO OFFICE—535 The Rookery.  
LESLIE W. COLLINS, Manager.

SPECIAL TRAVELING REPRESENTATIVES:  
RICHARD S. EVANS,  
I. S. FIELD.

FOREIGN AGENT—REUTER'S TELEGRAM CO.,  
LIMITED, London.

SUBSCRIPTION, - - - \$4.00 a Year.  
To FOREIGN COUNTRIES, - - 26s. 6d. a Year.

BALTIMORE, NOVEMBER 24, 1893.

AFTER a stubborn fight of sixteen weeks, costing, it is estimated, over \$150,000,000, the great coal miners' strike of England, in which 350,000 men were engaged, has ended.

A NEW YORK dispatch announces that a new combination of steel-rail manufacturers has been formed with the understanding that the minimum price shall not be less than \$24.00 per ton.

H. M. NEILL, the cotton statistician, still sticks to his estimate of 7,700,000 bales of cotton as the crop of this year, and claims that the perfect picking weather strengthens his belief in this estimate. Sixty leading factors and buyers, in an estimate to the *Appeal-Avalanche*, figure on a crop all the way from 6,500,000 to 8,000,000 bales, the average being 7,200,000 bales.

THE Chattanooga (Tenn.) Foundry and Pipe Works has just closed a contract to furnish 6000 tons of iron pipe to Waterbury, Conn., the total price being reported at \$110,000. Southern industrial enterprises are steadily pushing their trade into the North and West, and it will not be many years before the "balance of trade" will be reversed, and the South will sell to other sections more manufactured goods than it buys from them.

It is again reported that the Rockefellers are inclined to go into the steel business on a very large scale, to consolidate all the Lake Superior Bessemer ore properties, to buy up one or more direct processes of steel-making, and, in general, to go into the business on such a scale as to monopolize it. While there is some foundation for some of these rumors, it is hardly probable that we will see the fulfillment of all of them for a while at least.

THE MANUFACTURERS' RECORD extends its congratulations to the Norfolk *Virginian* upon the celebration of its twenty-ninth birthday. May it continue to prosper with the growth and prosperity of the city which it represents, and may its editor long be spared to fight many more battles in behalf of whatever tends to the financial credit and to the general progress of his State. His work in these lines in the past has

accomplished untold good for the Old Dominion.

THE *Advertiser*, of Boston, figures out that free coal would mean a reduction of \$1.25 a ton on all the steam coal used in New England, and, naturally, having grown rich on protection, New England now wants free trade on everything that will help it to retain the industrial interests which have been built up by the aid of protection. But would it not be fair to give other sections a chance to enjoy the same benefits of protection which New England has so long enjoyed to its great profit.

SOUTHWARD the star of empire takes its way, and the predictions of the MANUFACTURERS' RECORD that were ridiculed not many years ago are now being fulfilled. The *St. Louis Age of Steel* very truly says that the renewed trend of foreign capital to the South is one of the significant signs of a coming revival of prosperity in that section, and that it is a foregone conclusion that the next few decades will see the long-neglected resources of that section in a fair way of broad and generous development.

AN engineer who is in no way interested in the enterprise replies through the MANUFACTURERS' RECORD to an attack made by the *Engineering and Mining Journal* on the proposed scheme of building a railroad to Dauphine Island, near Mobile, and the development of that place as a shipping point. The *Journal* claims that this is a wild scheme; "an engineer" who has been on the ground denies it. The MANUFACTURERS' RECORD wants the truth about it in the interest of the South. Has anyone else anything to say on the subject?

MANAGER EGER, of the Clyde steamship line, running between Jacksonville and New York, referring to the increased traffic from Jacksonville due to greater depth of water, reports that wool from Colorado and cotton from Texas are now being shipped through Jacksonville to New York, the steamer *Iroquois* on her last trip having taken 500 bags of Colorado wool and 1000 bales of cotton. Every improvement made in Southern harbors and every increase in shipping facilities are quickly followed by an increase of Western traffic seeking an ocean outlet.

THE Waldensian colony established in North Carolina some time ago is gradually being increased by new arrivals, 166 members of this sect having arrived at New York on Monday last on their way to the Old North State. These people are reported to be thrifty, hard-working settlers, who will prove of great advantage to North Carolina. The South heartily welcomes all such foreigners, and every well-located colony that is established in that section will in time become a centre of attraction to draw others. The start in all immigration work, as well as in nearly all business enterprises, is the hardest part of the battle. The beginning has been made in immigration, and now we see nearly every day some new evidence of the Southward trend of population. The movement is very small at present, and no one need look for any great rush, but year after year we shall now see a steadily-increasing flow of immigration this way.

## Inducements to Manufacturers

An effort is being made by the Montgomery (Ala.) Commercial and Industrial Association to perfect the organization of the Manufacturers' Aid & Improvement Co., started some time ago in that city. In all 150 shares of its stock were taken, when, on account of prevalent conditions of business, further action was postponed. The idea of the company is to encourage manufacturing by buying sites for factories and loaning money to aid in building or equipping plants. The security will be by mortgages on the property. It is believed that an investment of this character will prove profitable to stockholders, while it will tend to stimulate the industrial growth of the city. A committee consisting of W. H. McComb, W. H. Micou, Jr., and T. L. Jones, who have been inquiring into the conditions and prospects of the company, make a very favorable report, and subscriptions are now being solicited for the balance of the capital stock.

## A Wise Move.

With its accustomed enterprise Charlotte, N. C., takes the lead in a new movement which must prove of great value to that town and also to the surrounding country. A company has been organized by some leading business men to make a specialty of the examination by able experts of all kinds of mineral properties, to have analyses made of ores and to establish a general exchange or headquarters where full information can be had by anyone of the mineral resources of that district. Efforts will be made to attract the attention of outside capitalists to the work of the exchange, and when necessary local capital will join that from outside in the development of the properties that have been fully examined and favorably reported upon.

This is a plain, practical, common-sense way of making Charlotte the centre of the industrial interests that will be developed in that district, but more than that, it is an excellent way in which to find out just what are the available resources of the region, to make a thorough investigation of them and then to make known to the world just what the opportunities for investment are.

## Free Discussion of Southern Matters.

THE MANUFACTURERS' RECORD believes in a full and free discussion of every subject that pertains to the progress and prosperity of the South. It has its own opinions, and is always ready to express them, but it readily accords to others the privilege of criticising what it has said editorially or what any of its correspondents, for whose opinions it is not responsible, may have said. It believes in free discussion, and for this reason it publishes a letter from Mr. W. S. Wilson, of Atlanta, who has some decided views on the negro question which are not in harmony with the MANUFACTURERS' RECORD's nor with those of the great majority of leading Southern people.

While readily admitting Mr. Wilson's claim that Texas is a great State, rich in agricultural, mineral and timber resources, with a future that can scarcely be overestimated, we believe that under

proper cultivation most of the farms of Georgia would yield as large net results in the comfortable support of their tillers with good health and other advantages, as any other section of our country.

## Another Victory for Electricity.

Electricity having driven the mule and horse from the field of street-car operations, now threatens to drive the patient mule from the canal tow-path. The experiment made on the Erie Canal was apparently a great success, and, if final tests prove that the cost of transporting freight on the canal by the use of electric-power is as small as is now claimed, we have seen the beginning of another revolutionizing movement in the freight traffic of the country. Governor Flower, of New York, speaking of the results of this experiment, said that it would now be possible to increase the traffic on the canal from 3,000,000 to 12,000,000 tons a year and that the cost of handling freight would be reduced 75 per cent. If these statements are proven to be correct, we will soon see renewed interest in canal construction. Already the question of introducing electric-power on the Chesapeake & Ohio Canal is being considered. The splendid water-powers on the Potomac river would furnish cheap power for the generation of electricity, competent authorities having reported that the Great Falls of the Potomac alone can be developed to produce over 75,000 horse-power. With the introduction of electricity on this canal, and the consequent cheapening of freight rates on coal, there would come many important questions bearing upon the coal interests of Maryland and the Virginias.

## Artificial Precious Stones.

The manufacture of artificial precious stones may be one of the possibilities of the near future. According to reports made to the government officials at Washington, a chemist, while attempting to make artificial diamonds, accidentally discovered a mineral which is said to be the hardest substance in existence with one exception. It is called carborundum. The inventor for making his gems obtained from the Cowles concern in Lockport, N. Y., the use of its aluminum-smelting apparatus. In reducing that metal electricity is employed, generating an enormously high temperature. As a chance experiment, he put into the furnace a lump of clay, together with a piece of graphite, which is pure carbon. The result was some small wine-colored crystals of rhomboidal shape. On examination it was found that they were harder than sapphire. The diamond is the hardest of natural minerals; sapphire comes next, and then ruby. Chemical analysis proved that the crystals were composed of carbon and silicon in a combination hitherto unheard of. It does not occur in nature. The process above described, repeated again and again, produced the wine-colored rhomboids every time. A company, it is stated, has been formed to manufacture them for polishing all sorts of articles, even diamonds. They are crushed to powder like emery and made into wheels with a cementing compound. It is believed that they can be used for jewelry of all sorts and that they will take their place among the gems in popular favor.



### The Tariff Fight.

The report that coal and iron ore are to be put on the free list in the new tariff bill has brought out the fact very prominently that party lines do not control the belief of the business men who are affected by tariff matters. The delegation from Alabama that visited Washington last week to make an earnest protest against free ore and coal was composed mainly of leading Democrats, including such men as Mr. T. G. Bush, president of the Mobile & Birmingham Railway; Col. John M. McKleroy, president of the Anniston Land Co., and Mr. N. Baxter, Jr., of the Tennessee Coal, Iron & Railway Co. The MANUFACTURERS' RECORD rejoices to see this movement, because it means that the foremost business men of the South—the men who are building up its industrial interests, who are leaders in the great advance movement that is bringing wealth to this section—are taking business interests out of party lines and discussing them purely from a business standpoint. This is what the MANUFACTURERS' RECORD long sought to bring about, and it advocated it freely and unceasingly, because it believed it to be for the best interests of the South. Mr. Bush made an earnest plea for protection to the coal and iron interests of Alabama and pointed out how their development had increased the wealth of the State, and in conclusion said:

In 1876 the total assessed values in Alabama were about \$160,000,000. This was at the beginning of the production of coal and iron. Today the assessed values were \$260,000,000. The increases were found in the mineral districts. The development of these industries has greatly benefited the farmer and improved the market for their goods. They wanted both the coal and iron trade protected. If the duty on these articles were reduced the pay of the laborers engaged in their production would also be reduced. If their pay were reduced it would drive them to the farms. The industry in the South was still an infant and needed the present degree of protection. Those engaged in the business had been encouraged to enter it by legislation. If any one was to blame for the present request it was those who made the laws. If the committee was going to experiment he asked that they do it gradually. Do it so as not to strike down a great industry. The gentlemen before the committee were business men and not politicians. They were Democrats by principle, and certainly did not expect to suffer in the house of their friends. If they did it was a question as to "how long they would kiss the hand that smote them."

On the same day that this delegation from Alabama presented its plea for protection, a delegation of farmers from Norfolk county, Va., appeared before the committee in behalf of a retention of the present duty of twenty-five cents a bushel on potatoes. These farmers claimed that the tax upon potatoes did not raise the price of this staple article of food. Norfolk, they said, handled 1,000,000 barrels of potatoes a year, worth \$3,500,000. It is very important, they said, to protect the Virginia farmers engaged in this business "against the importation of Nova Scotia potatoes, which come in ballast, paying but little or no freight, and the labor in their production and the value of land upon which they are raised being less than in the United States, the growers of potatoes here would be placed at a disadvantage if they were compelled to meet this Canadian competition."

It was bad enough for the iron and coal people to ask for protection, but for a delegation of farmers to ask for protection must have made some of the ultra free-traders wonder what would come next.

## CORRESPONDENCE

### The Negro and Immigration.

ATLANTA, GA., November 15.

Editor *Manufacturers' Record*:

I was very much entertained by the very able address in your issue of October 13, by Mr. C. J. Haden, "Why Georgia is the Empire State of the South." I appreciate Mr. Haden's work, study and able argument, but must say that I cannot agree with him. I will first say that Texas, in my judgment, is certainly the "Empire State of the South." It raises more wheat, oats, corn, cotton, wool, cattle and horses than any State South. It is really a complete domain within itself. Among the sad things about Georgia is that so many of its best white people move to Texas every year. In north Texas you will find whole colonies of Georgians. One of the main reasons for this is the poor soil in Georgia and the rich soil in Texas. Little or no guano is used in Texas, while thousands of tons are used every year in Georgia. All this additional expense has to come out of the farmers. It is the immigration that has made Texas, and the emigration has been keenly felt from Virginia to Louisiana. From long study and close observation I am convinced that the negro is to blame for nearly all our troubles in the South. Mr. Haden says "the negroes of Georgia, although only paying about 3 per cent. of the State tax, enjoy their full pro rata of the public school fund in proportion to numbers where they see fit to use it." This is one of the very strongest arguments he could mention in favor of putting them into separate Statehood. The cost of governing or punishing the negroes for crime is far beyond the percentage of taxes they pay in that direction. Our police stations, jails and penitentiaries are crowded with them. Mr. Haden says "the colored man was brought to us against his protest. The negro cannot do without us, and we cannot spare him. Those who have been brought into direct contact with him know he is an indispensable factor of our industrial system."

It is a fine theory to say that the negro has been brought here against his will and must stay, but I contend that a negro has no more rights in this country than the Indian had. The Indian was driven back on account of scalping and murdering the whites, notwithstanding he owned the lands. Is it reasonable to suppose that the negro will be allowed to remain in the South when rape, murder, arson, forgery and thefts are on the increase every year? The country in Georgia, south of Macon, what is it? The soil is far more susceptible of cultivation than north Georgia. The experimental farm of the Georgia Southern & Florida Railroad shows that the climate is such that a farmer can raise almost any crop, and several crops off the same ground every year, but who is there to till the soil? The white people live mostly in the cities and towns, and the negroes will not work the farms to any extent. The timber is fine, and is being rapidly cut up by the numerous saw mills. Now, my friend Mr. Haden owns thousands of acres of land in that section of Georgia that he cannot sell for over \$5.00 per acre where the timber is cut off, or \$7.00 per acre where there is virgin forest. Why? If he could make another trip to Germany, and be able to say, "fellow-farmers, come to Georgia, I have a whole county without a negro in it; I will sell you fine lands that have never been cultivated, at \$10.00 per acre," could he bring a colony? I believe he could do so, and then imagine, if you please, what a magnificent county that would be when every acre was cultivated by a white farmer. Oh! if the great tide of immigration that has filled up Iowa, Minnesota, Wisconsin and the Dakotas could only be turned into old Georgia for a few years, that would

settle the negro problem, by white labor forcing them all out of the State, thereby making "Georgia truly the Empire State of the South."

W. SILBERT WILSON.

### The Mobile & Dauphine Island Railroad

Editor *Manufacturers' Record*:

In the last issue of the *Engineering and Mining Journal* there appears a most ill-conceived editorial denouncing the projected railroad from Mobile, Ala., to Dauphine Island, and asserting as facts a great many things which are utterly false and ridiculously incorrect. It is difficult to understand just why such statements should be made, since they show clearly the entire ignorance of the writer on the subject in question. I believe that during last summer the editor of the *Journal* made a brief visit to some points on lower Mobile bay, but he saw through curiously-colored glasses if his observations are embraced in the article in question.

That part of the editorial dealing with the "scheme" is as follows:

"The Dauphine Island scheme is, in the opinion of competent engineers who have examined into it, one of the worst class. The Dauphine Island Improvement Co., which seems to be the same thing as the Dauphine Island Railway & Harbor Co., owns, according to the surveyor's map, 680 acres, or a little more than one-fourth of Dauphine Island, Ala., and that portion of it, a mere sand-bar, was completely inundated in the recent storm, reports stating that it was covered by seven to eight feet of water, and that everything movable was washed off it. To get to this delectable site for an industrial city the company has to build 10.7 miles of trestle on piles across Grant's Pass, a portion of which will be in quicksands, and to get away from it would have to build a harbor out in the open Gulf of Mexico from this sand-bar."

"The whole scheme, from an engineering standpoint, is wild in the extreme and impracticable in a business sense, and all the money invested in it has even a worse foundation than in the Harney Peak tin mines. The inevitable loss of all this capital will necessarily injure legitimate enterprises, and we trust our English contemporaries will urge upon those interested in the Dauphine Island enterprise to have it carefully investigated by competent and disinterested experts who are familiar with the gulf coast and the engineering as well as the business elements of the problem before they part with their money."

I would like to know the names of the "competent engineers" who are totally disinterested and regard this as both impracticable and one of the worst class of schemes. Mr. T. W. Nicol, who made a series of exhaustive surveys and soundings, has pronounced the matter perfectly practicable, and Mr. Stevenson, a London engineer sent over to report upon the matter, has asserted the same thing. Both of these gentlemen are too well known to have their ability or honesty impugned by such assertions. Other engineers of ability have both officially and unofficially expressed a favorable opinion of the enterprise, and it would be interesting to know who are those stating that it is impracticable, and what reasons they can give to hold their position.

Whether the Dauphine Island Improvement Co. and the Dauphine Island Railway & Harbor Co. are one and the same thing or two concerns is a minor matter. It happens that the latter is the case, though the two are so connected by interchange of stockholders that their interests are identical. It is quite true that the former company owns about 700 acres of land on Dauphine Island, but it is quite absurd to state that this is a mere sand-bar and was completely inundated to a depth of seven or eight feet during the recent storm, while everything movable was washed off. This assertion

alone damns the article as being without foundation. A glance at the map will show that Dauphine Island proper is a long and narrow island running almost fourteen miles east and west, its eastern terminus being the site of Fort Gaines. From this point west about five miles the island varies from one to one and a-half miles in width, the south shore being protected by a series of sand hills or dunes, in some places nearly seventy feet in height. From the northern foot of these dunes to the upper shore of the island is comparatively low ground, well covered with a growth of pitch pine and heavily carpeted with brush, weeds and grass. Along its northern edge the island is low and swampy in places. Beyond the wooded part to the west there is a long, low spit of sand half a mile wide extending nearly nine miles. From the eastern end of the island there is a smaller island known as Little Dauphine Island, which extends two or three miles northwest from the main island, being separated from the latter by Pass Jury, a narrow bayou. This smaller island has about the same elevation above water as the main island.

The recent storm came from the southeast, and, consequently, the entire northern shore of the island was protected from the full force of the wind and waves, the only trouble experienced being in some of the lower places, which were flooded from water backed up in Mobile bay. The western extremity of the island was, of course, washed by the waves. The facts of the storm are that Little Dauphine Island was partially covered with back-water. The large island was under water only along its northern border, and even at Cedar Point, which was exposed to the full force of the gale, a store setting within thirty feet of the water was not injured, nor were the numerous houses along the shores.

The editorial further asserts that to get from the mainland to Dauphine Island it will be necessary to construct "10.7 miles of trestle on piles across Grant's Pass." Now, it happens that from the northwest end of Little Dauphine Island to Cedar Point, which is practically on the mainland, is something under five miles, if the government coast surveys can be relied upon, and for nearly the entire distance the water does not exceed three feet in depth, excepting in one place, Heron Pass, possibly fifty feet wide, where it will average five or six feet, and at Grant's Pass, nearly half way across, where a channel twenty feet deep and possibly 100 feet wide was dredged out of a solid oyster-shell bottom. It is doubtful if there is a foot of quicksand in the entire distance. It is all a natural oyster bed, and so far as any reliable data shows, is solid. It is possible that some difficulty may be found in securing proper foundations for breakwaters, etc., but this remains to be seen. No sufficiently extended borings have yet been made, and an assertion that there will not be is entitled to as much weight as the *Journal's* statement to the contrary.

Not only is this proposed railroad a perfectly practicable matter, but it would in time become a most prosperous one. With proper harbor facilities here the present sea-going business of Mobile, which would be largely diverted to this place, would be trebled within a short time, and before many years bring Mobile as great a foreign commerce as New Orleans has.

The commercial feature of the enterprise is most inviting if properly conducted, and from an engineering point of view it will be far less expensive or difficult to secure these ends than it was for the Louisville & Nashville or New Orleans & Northeastern to get into the Crescent City. It is quite incomprehensible why the editor of the *Journal* should have made such a malicious attack on an enterprise about which he seems to know so little. AN ENGINEER.



## COTTONSEED OIL.

This department is open for the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

### Oil Ought to Sell Higher.

Mr. G. W. Sanches, of Rotterdam, who has been making an extended tour of the Southern States and visiting the cotton-oil mills in that section, called at the office of the MANUFACTURERS' RECORD on Wednesday of this week, on his way to Holland. Mr. Sanches is of the opinion that the producers would do better to hold their oil than to sell at present prices, as the scarcity of hog products promises higher figures for oil. Speaking of the situation in Texas, where so many new mills have been put in operation this year, Mr. Sanches said: "The Texas mills have borrowed heavily to buy seed and the banks are pushing them for money. Consequently they are compelled to sell their oil at the best prices they can get; but when they get their seed paid for and get clear of the banks, they will be in a position to make better prices for their oil. The Texas mills are now paying about \$14.00 per ton for seed, but they have paid as high as \$18.00. The reason they can compete with Eastern mills, that pay much less for seed, is that the Texas mills sell their hulls to the cattle feeders for \$5.00 per ton, while mills further east, paying much less for seed, get only \$2.00 per ton for their hulls."

### Shipping Cotton Oil in Bulk to Europe.

The report of the American Cotton Oil Co., presented at the recent annual meeting, gives some interesting information relative to the plans of the company for the development of its foreign trade.

The exports of oil, cake and other products to Europe have been such for several years as to require the services of a resident representative abroad to care for the interests of this organization in its varied business relations with its customers in the United Kingdom, Scandinavia, Netherlands, Germany, France, Italy and other countries. The increase of this trade prompted a careful study of the best methods for its further development. New Orleans was selected as the principal port of shipment, because it is nearer than all others to the largest manufactories of the choice quality of products required in the foreign trade. Rotterdam was chosen as the headquarters in Europe, because of its favorable location as a centre of distribution. Having thus determined upon the ports of production and consumption to be brought into close connection, it was but natural in investigating the transportation question to profit by the experience of others and adopt the tank-steamer methods of shipments in bulk, now so extensively used.

As refined cottonseed oil is not impaired by storage or transportation in iron tanks, the tank-steamer method of shipment presented no objection. Cottonseed oil is not inflammable, and the fire risk is nominal. The economies in handling co-operation and freight, added to the advantage of tank-steamer method of shipments in summer, with greater facilities for storage and delivery, were influences that guided the decision to build, own and operate the first tank steamer carrying cottonseed oil in bulk.

Rotterdam is the principal market in Europe for artificial butter and food oils. In the year 1892 it imported 8,356,676 gallons of cottonseed oil, of which 5,973,766 gallons were from this country.

By the cheap freight facilities on the Rhine, Germany and other consuming countries of interior Europe are favorably reached through the port of Rotterdam. This port is of growing importance. Its

tonnage imports are more than 40 per cent. of the entire Netherlands. Its harbor improvements are upon a generous scale. Its depth of water, length of docks, warehouses and facilities for direct transshipment by canal, river and rail make it a hospitable haven for foreign trade, and its citizens cultivate commercial relations with foreigners.

The laws of the kingdom are liberal and protective for foreign business enterprises, thus inducing capital and shipping interests to establish relations with its people.

It was, therefore, decided to establish European offices at Rotterdam. A plot of land comprising 64,556 square feet, situated on the left bank of the river Mass, at the Rynhaven, with about 425 feet of river front, has been purchased from the city, which is constructing thereon two piers, each sixty-five feet long and thirty and twenty feet wide, respectively, and all at the expense of the city excepting one-third of the cost of the wider pier, which is to be paid for by this company. The State railway line bounds one side of the property. A spur track will be laid through the property. A series of tanks are now being erected for the storage of oil. There are also under construction a warehouse for the storage and handling of cake and meal, a cooperage shop and the necessary engine and pump buildings. The city has agreed to maintain the present depth of water in front of this property, thereby permitting the tank steamer to lie alongside of the piers for receipt and delivery of her cargo. Tank cars and tank lighters will be used for the delivery of oil to customers, who have already, in anticipation of the inauguration of this system, prepared their storage tanks for the reception of the oil in bulk.

The steamer Aco is now under construction at the Inch Works, Port Glasgow, Scotland, and is expected to be ready for her first voyage to New Orleans some time in February next. Proposals for her construction were received from the leading English and American builders. The difference in prices, based upon the same plans and specifications, was so great as to necessitate the award of the contract to English parties, notwithstanding the advantages and prejudices in favor of American construction.

The Aco is a spar-deck, steel-screw tank steamer of twenty-three feet four inches mean draft when fully laden, and designed to carry a varying cargo of 4200 tons of oil or cake and meal in compartments. The engines are of the triple-compound, direct-acting, surface-condensing type, of not less than 2300 indicated horse-power, and are located aft. The specifications require the highest classification at Lloyd's, the Bureau Veritas and by the Holland surveyors. The pumping facilities will permit the receipt or discharge of the entire cargo of oil in less than forty-eight hours. The appliances for safety, convenience and facility of operation are of the latest and most approved designs.

The Aco will be sailed under the Netherlands flag and a Rotterdam master. It is proposed to organize the Holland-American Cotton Oil Co. under the laws of the Netherlands. The dock property in Rotterdam and the steamship Aco complete will be transferred at cost to the Holland Company, the share capital of which, amounting to 1,250,000 florins, will be subscribed and paid for at par by this company. About \$100,000 (250,000 florins) have already been paid on this account.

This move on the part of the American Cotton Oil Co. is viewed with much concern by the producers outside the combination, as it will make it practically impossible for the independent refiners to compete with the trust for foreign trade. As a counter movement, we learn that the construction of a competing steamer by independent shippers is contemplated, and

it is not unlikely that the project will be carried out. There is already such a trade with Holland in cake and meal that regular shipments are made by the cargo from Galveston to Rotterdam at frequent intervals, tramp steamers being employed in this trade. Cotton-oil shippers in New Orleans and Rotterdam merchants are now considering the plan of building a combination steamer, with tank capacity for about 5000 barrels of oil and space for half a cargo of cake and meal. This would place the independent shippers on about an even footing with the American Cotton Oil Co.

The Texas producers are greatly interested in this scheme, for it is in that State that the American Cotton Oil Co. has its most formidable competitors. The business of the south Atlantic States is pretty well within the control of the combination, as the Southern Cotton Oil Co. is working in harmony with the American, but in Texas a large number of independent mills have been built during the past year, and the producers in that State are interested in any plan that promises to give them a market for their product.

### Combining for Higher Prices for Seed.

A convention of the Georgia Cottonseed Growers and Shippers' Association was held in Augusta, Ga., on the 16th inst. The object of the meeting was to adopt some measure by which they could force better prices for cottonseed. The meeting was presided over by President O. A. Horne, of Hawkinsville, Ga., Mr. H. M. Franklin, of Tennille, acting as secretary. The members present fully discussed the manner to be adopted to bring about the purposes they had in view, and finally decided by resolution not to sell or ship seed to any one at \$11.00 per ton, the price now paid. The association has solicited bids from all the mills and claims to have received an offer of \$12.00 per ton for all it can furnish, and that it can supply 500 cars of seed in twenty days.

### The Markets for Cottonseed Products.

NEW YORK, November 22.

Our cottonseed-oil market has declined during the past week until prime crude reached the same figures for oil that were recorded early in September, when the oil trade was suffering, with all other branches of business, from utter stagnation. Sales of prime yellow have been made to arrive as low as thirty-five cents, although thirty-five and a-half and thirty-six cents are the prices realized for oil on the spot. Off yellow has been wanted, but sales cannot be made, because there is no supply. Prime crude has sold as low as thirty cents, but this price has lately been obtainable only for choice grades. Off crude has been in fairly liberal supply and meets with slow sale, and it is difficult to make any quotation, as it varies according to the quality. There has not been any accumulation of oil of consequence, excepting off crude, and we think buyers are a little more disposed to take oil at current figures. There is some demand here for the Mediterranean for off yellow oil, but no supplies can be found; some little inquiry for prime oil and butter oil for export, but bids are yet too low for business. Chicago is still buying oil in the South at prices much higher than are ruling here, and our receipts will undoubtedly be much lighter in a fortnight unless conditions here improve. It is reported that sales have been made today at twenty-six cents f. o. b. loose at mills, so that the mills are taking lower prices for oil, although getting seed at lower prices. This price is equal to thirty-two cents per gallon here in barrels, so that there is no encouragement to ship here.

German and Dutch markets are not anxious about oil, as the butterine trade continues very dull. All fats are again

lower, with oleostearine down to eight cents, a decline of two and one-quarter cents in three weeks. Compound lard is down to seven cents and trade very dull. The local consumers of cottonseed oil are fairly well supplied for immediate wants, and they will be conservative buyers while lard is dull. English market is only 3d. lower for the week, and our reports from London indicate that a feeling prevails there that better prices will be seen after the turn of the year. Under date of November 11 our advices state stocks of seed at Alexandria 13,269 tons, against 51,028 tons in 1892.

General business is slowly but steadily reviving, and we cannot but think that prices for oil are low enough for the present.

HOPKINS, DWIGHT & CO.

NEW ORLEANS, November 20.

The New Orleans cottonseed-product market for the past week has been very much depressed, especially in crude and refined oils, the prices declining some three or four cents, and the outlook today for the mills is anything but encouraging, as we see no chance for an advance in the very near future. We learn from a reliable party just from Mississippi, Alabama and north Louisiana that the seed is about all gathered and most of it already marketed. Cake and meal have been no exception to the declining market, and buyers report still lower offers from abroad. We quote prime crude loose here for November and December shipment at twenty-seven and a-half to twenty-eight cents; in barrels thirty-one cents asked; refined, thirty-four to thirty-seven cents—none offering; cake and meal, \$22.25 to \$22.75 per long ton f. o. b. for current month; jobbing at depot in carload lots, \$20.00; linters, A, three and three-quarters to four and one-quarter cents; B, three and one-half to four cents; C, two and a-half to three cents, according to style and staple; ashes, \$17.00 to \$18.00 per ton, with none offering.

JAMES RAINEY & CO.

ROTTERDAM, November 4.

The official figures of stocks arrived and delivered in October are as follows:

	Gross Weights.
	Kilos.
Stock on October 1—Rotterdam.....	4,079,921
Amsterdam.....	498
Arrivals in the warehouses in October—	
Rotterdam.....	724,343
Deliveries from the warehouses in October—	
Rotterdam.....	1,800,485
Stock on October 31—Rotterdam.....	3,003,779
Amsterdam.....	498

The stock in the warehouses has therefore decreased during October 1,076,142 kilos and amounts on October 31 to 3,003,779 kilos, or about 15,000 barrels. This stock is not large and is still decreasing, because every day the deliveries are larger than the arrivals. The first hands (the importers) have only very limited quantities to offer.

The weather in Holland is very cold for the season; every night it is freezing; so the butterine manufacturers are using much oil. The market has been firm, but very quiet, during the past week. There has been very little demand for butterine and England is buying here very little. The butter-makers think that England's small purchase is due to the strikes there. They hope that the demand will be more active before long, and if there is a good demand for butterine there is also a good demand for oleo and for cotton oil. The price for cotton oil remains thirty-six to thirty-seven guilders, but very little business has been done.

It is not probable that prices will decline, and, on the contrary, it is most probable that prices will advance, because we can wait now a good demand, and because prices of lard remain high and stocks of oil are very small everywhere. America is always reporting that the crop is not large and that higher prices are to be expected.

G. W. SANCHES.

[NOTE.—The price in guilders per 100 kilos multiplied by 1.34 will give the price in cents per gallon.—Ed.]



## Cottonseed-Oil Notes.

THE Georgia Mills & Elevator Co., of Macon, Ga., has opened up in a new line after being idle several months. It is now known as the Georgia Cottonseed Oil Mills, it having been changed from a grist mill at the time of the shutting down in order to put in machinery for the new industry. Mr. Wallace McCaw, the president of the company, is one of Macon's most enterprising young men.

THERE was a large meeting of cottonseed-oil men at Columbia, S. C., on the 16th inst. The object of the meeting was to discuss the situation in cotton oil and cottonseed. It has been rumored for some time that the lard men in Chicago, who use large quantities of cotton oil, have combined to reduce the price. At the beginning of this season the price of oil was about forty cents per gallon at the mills, whereas now it has declined to about twenty-five cents at the mills. The seed war in Texas has also seriously affected the market, and although now ended, so much seed has been marketed that oil is now hard to sell at any price. It is understood that the main purpose of the meeting was to devise means to defeat the bear movement in the oil market. The following representative oil men were present: B. C. Johnson, Easley, S. C.; W. R. Doty, Winsboro, S. C.; W. E. Thomson, Union, S. C.; Alexander Long, Spartanburg, S. C.; Charles H. Fisher, Edgefield, S. C.; J. A. Brock, Anderson, S. C.; L. W. Floyd, Newberne, S. C.; A. Cureton, Greenville, S. C.; R. H. Hudgins, Laurens, S. C.; E. M. Lipscomb, Ninety-Six, S. C.; W. B. Milwee, Greenwood, S. C.; J. T. Rice, Belton, S. C.; George L. Baker and C. Fitzsimons, Columbia, S. C.; J. D. Dawson, Augusta, Ga.; D. A. Tompkins and F. Oliver, Charlotte, N. C.

## Atlanta's Commercial Club.

The Atlanta Commercial Club has elected the following named officers to serve for the ensuing year: President, R. B. Bullock; vice-president, H. C. Stockdell; treasurer, T. B. Neal; secretary, H. B. Adams. Directors: Marshall J. Clarke, J. C. Haskell, N. J. Hammond, N. O. Harris, R. F. Shedden, M. F. Amorous, J. G. Oglesby, Charles T. Hopkins, Clark Howell, Jr., S. F. Woodson, J. K. Ottley. The officers and directors include some of the best known business men of the city, and the next year promises to be even brighter and more promising in the club's history than those in the past.

## An Enterprising Land Company.

The Cherokee Land & Improvement Co., of Knoxville, Tenn., which controls a large tract of land in the vicinity of the city, is making preparations to improve the property. It is reached by a steel bridge which the company built at its own expense across the Tennessee river. This bridge alone cost \$75,000. It is proposed to build an electric railway line from the city to the tract for the convenience of suburban residents. Many of the company are Ohio capitalists, among whom are Benjamin Wheeler and W. W. Harper, of Zanesville, and James Reynolds, of Mansfield.

THE Clear Springs Phosphate Co., operating in Polk county, Fla., will commence work on its new plant in about two weeks, and the manager expects to have everything in readiness to commence operations some time in February next.

THE report of the board of fertilizer control of South Carolina shows that 200,372 tons of fertilizers were sold in that State in 1893, against 144,385 tons in 1892.

THE Belle Phosphate Co., of Fort Meade, Fla., is pushed to its utmost capacity to supply the increased demand for phosphate.

## PHOSPHATES.

## The Phosphate Question in South Carolina.

The annual report of the phosphate commissioners of South Carolina has been completed, but has not been given to the public in its entirety. From advance sheets of the report obtained the general condition of the industry is given. Since the miners declined to accept the terms of the board it has been generally thought that the board would leave the entire matter to the legislature and have nothing more to do with the adjustment of the difficulties. The closing paragraph of the report says: "It will be seen that the condition of the phosphate industry is far from encouraging. We suggest the appointment of a special joint committee of the house and senate to proceed to Beaufort and make examinations of the conditions existing there. There are many who feel that the board of phosphate commissioners has offered too much, while the miners seem to think that it has not been liberal enough. An intelligent understanding of the situation can only be obtained by personal inspection, and, after this is had by the members of the house and senate, any legislation proposed by such a committee could be properly explained by those to whom the investigation shall be entrusted. The general assembly would thus be enabled to act for the best interest of all concerned."

From Inspector Jones's report the following figures relating to the industry have been collected. The total amount of royalty for the year ending August 31, 1893, is as follows:

Coosaw Mining Co., September 1 to January 1, 1893.....	\$11,446 40
Coosaw (new) to August 31, 1893.....	94,391 65
Oak Point to January 1, 1893.....	\$105,838 05
Carolina Mining Co.....	1,581 94
Farmers' Mining Co.....	63,521 60
Beaufort Phosphate Co.....	46,093 95
Ashley Phosphate Co.....	27,613 96
J. C. Nelson.....	291 95
James Reid.....	487 00
F. W. Wagener & Co.....	487 00
Total royalty.....	\$219,338 02
Total last year.....	156,095 01

Increase..... \$63,243 01

The foreign exports were 182,122.64 tons; coastwise, 47,870.05 tons; Charleston, 10,569.23 tons; Beaufort and the interior, 8776.10 tons; total 249,338.02 tons. The amount of rock on hand August 31, on which a royalty of fifty cents per ton is to be paid if the conditions of the resolutions of the board are accepted, was as follows: Coosaw Company, about 15,411 tons; Carolina Mining Co., actual 5255.25 tons; Farmers' Mining Co., actual 6158.40; Beaufort Phosphate Co., about 4927 tons; James O'Hear, about 265 tons; J. C. Nelson, about 407 tons; total on hand August 31, 1893, about 32,423.65 tons. The amount of rock on hand November 1, 1893, was 25,173.10 tons, being the amount on hand August 31, 1893, less shipments in September and October by the Carolina Mining Co. and Beaufort Phosphate Co.

## Phosphate Markets.

OFFICE MANUFACTURERS' RECORD, BALTIMORE, November 23.

The local phosphate market is very steady, but quiet at the moment. Buyers have not been numerous during the week, and the volume of transactions have been light. Advice from points of production report values as firm, with holders not disposed to make contracts except at outside figures. The receipts of rock have been large during the week and embrace the following cargoes: Schooners Edward G. Hight, 840 tons; David Beard, 860 tons; Blanch Hopkins, 875 tons; Emma Middleton, 650 tons, and Lida J. Lewis, 801 tons, all from Charleston, S. C.—total 4026 tons. We note charters as follows: Schooners Mary S. Bradshaw, Ashley river, S. C., to Baltimore, and Isabella Gill, Ashpoo, S.

C., to Baltimore, both on private terms. Values close very steady as follows: South Carolina rock \$5.00 for Charleston, \$4.75 for Ashley river and \$5.00 to \$5.25 for Ashpoo, all f. o. b. Florida rock \$5.00 for 60 per cent. river pebble, \$5.50 for 65 per cent. and \$5.75 to \$6.00 for 70 per cent., all f. o. b. Charlotte Harbor or Tampa.

## FERTILIZER INGREDIENTS.

The prevailing tone for fertilizer material during the past week has been of a more active character. At the decline previously noted there has been more inquiry developed, and supplies offering of higher grade ammoniates have been taken freely at \$2.35 f. o. b. Chicago for blood, \$2.25 for concentrated and \$2.10 to \$2.15 for hoof meal, with a firmer feeling at the close. The offerings of 7-30 tankage are more abundant and prices weaker. Nitrate of soda is in good demand and supplies not excessive, while a sharp advance is noted. The following table represents the prices current at this date:

Sulphate of ammonia.....	\$ 3 20@	\$3 35
Nitrate of soda.....	1 87½@	2 00
Hoof meal.....	—@	2 40
Blood.....	2 50@	2 65
Azotine (beef).....	2 75@	2 80
Azotine (pork).....	2 75@	2 80
Tankage (concentrated).....	2 40@	—
Tankage (9 and 20).....	\$2 45 and 10 cts.	—
Tankage (7 and 30).....	21 00@	22 00
Fish (dry).....	27 00@	28 00
Fish (acid).....	18 00@	20 00

CHARLESTON, S. C., November 21.

There is a much better feeling in the phosphate industry of this State, and since the publication of a portion of the report of the board of commissioners the market has been of a more active tone. This market at present is decidedly firm and the domestic demand is good. At points of production throughout the State land miners are very busy and the output will be much larger than expected. River mining is expected to commence soon, and several companies are making repairs and adding new machinery preparatory to going in at a lively pace, and it is expected that the new year will see an active development of phosphate. The clearances during the week ending November 17 were as follows: For Baltimore per schooner David Beard, 940 tons of rock, and schooner D. K. Baker cleared with 735 tons of rock for New York. The total domestic exports from this port since September 1, 1893, aggregate 23,652 tons of crude rock and 300 tons of ground, against 32,702 tons of crude rock and 876 tons of ground for 1892. The market closes firm at \$4.50 for crude rock; \$5.00 to \$5.25 f. o. b. Charleston, and ground rock \$7.00 to \$7.50 f. o. b. in bags.

## Phosphate and Fertilizer Notes.

A SPECIAL to the MANUFACTURERS' RECORD from Fort Meade, Fla., reports the supply of phosphate at present as very light, several mines not running and prices tending upward. There is a good demand for rock and it is not to be had for shipment. The question as to sale of phosphates by American analysis has at last been finally settled. The Phosphate Miners' Association of Florida has decided that in future it will only sell phosphate for foreign markets free on board ships at ports of shipment, American weights, analysis and payment, and for domestic markets by water transportation on analysis taken from samples drawn at port of shipment, but subject to outturn weights at destination. On inland shipments all contracts will be free on board at seller's works.

THE phosphate outlook around Anthony, Fla., is said to be very promising. The advance in the price of rock has stimulated miners generally and stocks have been very much reduced during the past month. The French Company has about 225 hands on its pay-roll and will show a large output during the winter. This company is building a large storage-house which will be similar to a grain elevator and will have a capacity of 3000 tons of phos-

phate. The new rotary driers recently erected will enlarge the company's drying capacity very materially. It is stated that the Deacon Phosphate Co. is about to adopt the emery mill instead of the grinding mill now in use. The Ross grinding operations near Sparr, although temporarily suspended in order to make repairs on the mill, will be resumed in a few days. It is rumored that a New York capitalist is considering the purchase of the Lutz Phosphate Co.'s property which was abandoned more than a year ago for want of means to complete the plant and begin operations. The Lindner Phosphate Co. is removing overburden to the depth of from eight to ten feet from quite a large deposit preparatory to regular mining and washing operations.

MR. H. F. MAYFIELD, patentee of the Mayfield phosphate washer and drier, and superintendent of construction of the Foote Phosphate Co.'s fine plant near Bartow, Fla., reports work progressing very satisfactorily on the Foote plant.

THE machinery of the Liverpool phosphate plant in Polk county, Fla., is now being overhauled, and will be put in readiness to commence operations on the 1st of December.

THE product of the Bonnie May mines at Dade City, Pasco county, Fla., is in great demand and the company is doing good work. The plant of the company is being rapidly put in order and some improved machinery has been added.

THE Terraccia Phosphate Co., at Pebble-dale, Fla., is working up to its full capacity and the company is greatly encouraged with the present outlook for phosphate.

THE Alafia River Mineral & Land Co.'s plant in Hillsborough county, Fla., near Plant City, which has been shut down for more than a year, will resume operations very shortly. The machinery of the plant is being improved, and a general overhauling is now in progress. A new Mayfield washer and a rotary drier will be put in and other necessary machinery added to make the plant perfect in its various departments.

THE exports of phosphate from Port Tampa, Fla., during the current month are as follows: November 4—Barkentine Berwind, for Wilmington, Del., with 902 tons of pebble phosphate from the Pharr Phosphate Co. November 10—Barkentine James N. Elwell, for Perth Amboy, with a cargo of 1748 tons of pebble phosphate from the Bone Valley Phosphate Co. November 13—Schooner Charles G. Green, for Wilmington, Del., with a cargo of 1037 tons of pebble phosphate from the Pharr Phosphate Co. November 14—Schooner S. B. Marts, for Baltimore, Md., with a cargo of 813 tons of pebble phosphate from the Terraccia Phosphate Co. November 14—British steamship Lancaster Prince, for Marseilles, France, with a cargo of 2160 tons of rock phosphate from the Anglo-Continental Guano Co. The arrivals are as follows: November 7, Barkentine Miranda; 9th, Jessie McGregor; 11th, schooner Clara Goodwin; and on the 16th, American barkentine Carrie L. Taylor.

FERNANDINA, FLA., November 14.

Since my last letter the steamship Tonsberg, with 1900 tons phosphate, shipped by the Anglo-Continental Company, and steamship Edmondsley, with 1500 tons phosphate, shipped by the French Phosphate Co., have sailed. We have now in port the steamship British Prince to take cargo of 2400 tons Early Bird phosphate, and the steamship May to take 1500 tons French phosphate. We have charters for eight more steamers to arrive this month to take cargoes of phosphate, and the outlook for phosphate shipments are very bright. The prices f. o. b. Fernandina are higher now than they have been for nearly two years past.

A. P. ADAMS.



## MECHANICAL.

## Bowsher's Combination Grinding Mill.

The two accompanying illustrations show a combination grinding mill for feed, manufactured by N. P. Bowsher, South Bend, Ind., which embodies many points of excellence. This machine differs radically

It should be further noticed that simplicity of parts characterizes this machine, there being no gearing whatever, and that it is a very smooth, quiet running mill.

In the larger cut the mill is shown with elevator attached and ready for action. The elevator is not indispensable, but makes a very convenient sacker for parties wanting a complete independent outfit for



FIG. 1.—BOWSHER'S COMBINATION MILL WITH ELEVATOR ATTACHMENT.

in construction from other feed grinders in the market, and yet it embodies a number of practical labor-saving devices, which, with its excellence of design and construction, should commend it to discriminating buyers. It should not be confounded with mere cob-crushers; many millers are using it for grinding all kinds of chop and have recommended it as superior to burr mills. The distinguishing feature of the Bowsher mill

feed grinding. The other cut shows the machine open and illustrates the ease with which the interior may be reached. In order to throw the mill open in this way it is necessary to simply withdraw four pins—the work of but a few moments. The Bowsher "combination" feed mill has passed through five seasons, which have been a severe test on all feed grinders, and it has been widely successful and is highly

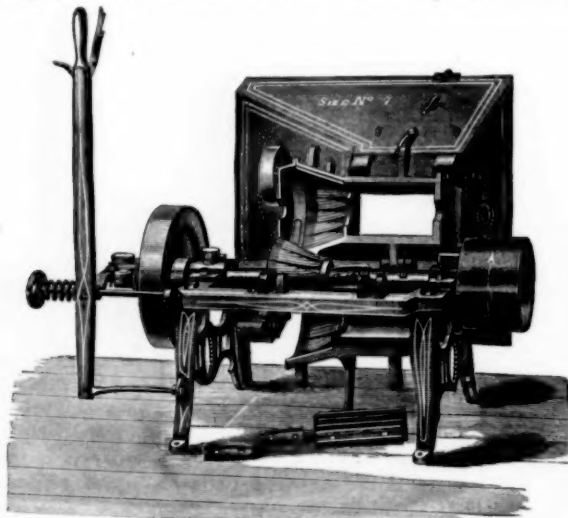


FIG. 2.—BOWSHER'S COMBINATION MILL OPEN.

is its conical-shaped grinders. By means of this cone shape it is possible to present to the grain at all times a correct shearing edge. A large extent of grinding surface is secured close to the centre of the shaft, thus making a remarkably light-running mill. The end pressure on the step is reduced to the minimum, and the construction is such that the grinders will not strike together when the mill runs empty.

recommended. It is built in three sizes, requiring from two to twelve horse-power and having capacities ranging from five to sixty bushels per hour.

It will crush and grind ear corn with or without the shuck on, and all kinds of small grain, cottonseed, oilcake, etc., or by means of the divided hopper it can be made to crush ear corn and grind small grain at the same time, mixing the two in

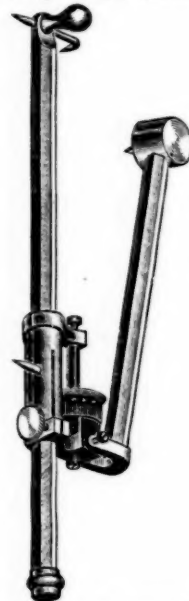
any proportion desired. A self-feeder is provided for ear corn, and other features which need not be detailed here contribute to make this a thoroughly modern and efficient feed mill.

All sizes of the Bowsher mills were awarded a prize medal at the World's Fair.

## Averaging Planimeter.

The accompanying illustration shows an averaging planimeter made by the Engineering Appliance Co., Jamestown, N. Y., for calculating indicator cards.

After the diagram is fastened to some flat, even surface, set the sliding bar by taking the whole length of the diagram measured on a line parallel with the atmospheric line, accurately between the steel points upon the side of the bar, then clasp the bar by means of the screw. Place



AVERAGING PLANIMETER.

the instrument in position with the wheel at zero and trace the outlines to the right. The figures on the roller wheel indicate tens, the intermediate graduations units and the vernier gives the decimal. The result of the reading or readings will be the mean height of the diagram in one-fortieths of an inch. A simple process is to multiply the reading by the factor corresponding with the scale used, as, for instance, the factor of forty scale is one, and with a forty spring the reading of the wheel is the mean pressure in pounds per square inch on the piston.

## To Encourage Southern Farmers.

An interesting gathering at Augusta this week has been what is known as the Young Farmers' Club of the Southern States. Robert E. Park, of Macon, is president, and Sidney Herbert, of Maitland, Fla., vice-president. The club is not organized on the co-operative or alliance plan, but is intended to encourage and promote improved methods of agriculture and to make the farmer's life more attractive. The programme for the Augusta meeting was to include addresses by Governors Northen, of Georgia; Carr, of North Carolina; Jones, of Alabama, and Tillman, of South Carolina. The club numbers representatives from many Southern States.

## What a Southern Ship-Yard is Doing.

Another indication of the progress made by Southern ship-yards is shown by the contract obtained by the Maryland Steel Co., of Sparrow's Point, Md., for constructing the new steamer for the New York police department. The boat, which is the first patrol boat ever built outside of New York city for service in New York harbor, has just been launched at the marine department of the Maryland Steel Co.'s plant. It will cost \$75,000 complete.

## A Rice-Milling Elevator.

Considerable interest has been manifested during the past year by commission men and others in New Orleans engaged in the rice trade as to the necessity of improving the methods of marketing the rice crop of Louisiana. The rice committee of the Board of Trade decided over a year ago that the principal reform needed was the handling and shipping of rough rice in bulk. To accomplish this it would be necessary to establish elevators and also to establish grades for rough rice. The National Rice Milling Co. some time ago took into consideration the project of building an elevator in New Orleans suitable for present purposes, and commenced the building in May last, choosing for its location a plot of ground adjoining the extensive milling plant of the company. The structure, which was completed last week, includes a warehouse 100 feet square and two stories high. The frame work of the building is of heavy beams, supporting iron girders, on which the roof and the siding are secured. The lower story is intended as a storehouse for cleaned rice in barrels, and will afford room for 12,000 barrels. The second story is taken up with a series of large bins, each with a capacity of 200 barrels of rice. Of these bins thirty are now completed, and should the experiment prove a success sixteen more will be added. Each bin is labelled with the name of a peculiar grade of rice and will be used only for that grade. The idea of the company is to transfer rice from the car into these bins, cleaned, weighed and graded, rapidly and successfully and taken thence to the milling department. The power required to drive the machinery of the elevator is derived from a sixty horse-power engine located in the milling plant adjoining. The capacity of the elevator is roughly estimated at about 800 barrels per hour, which is equivalent to 2400 bushels or four cars fully laden. In times of unusual activity the warehouse can be made to accommodate some 90,000 bushels of grain. The total cost of the completed structure is about \$20,000. This is the first rice elevator ever erected in the world, and should it prove a success the National Rice Milling Co. will build another at its mill on Montegut street similar in plan, but on a much larger scale.

## Large Output of Turpentine.

Indications point to a large output of turpentine this season, judging from the opinions of operators at Savannah. It is expected that much new timber will be cut, as most of the operators do not think it pays to work old boxes. An estimate of the old stock places it at a high figure. With these conditions the producers do not expect to realize very high figures. The dissolution of the operators' association is not expected to affect prices, as it is maintained that the market was steady before such an organization was thought of.

WE have received through the courtesy of Mr. Baird Halberstadt, of Pottsville, Pa., a copy of the new map of the bituminous coal region of Pennsylvania, prepared by Mr. Halberstadt and published by the Pennsylvania State Geological Survey. The map is made to the scale of four miles to the inch, and the location of every bituminous colliery is indicated by a number which corresponds to the number in a complete directory of the mines printed upon the map. The lines of transportation are clearly shown, and a smaller map of the entire State, fifty miles to the inch, indicates the general location of the bituminous and anthracite fields. The map is an excellent piece of work and a good example of the careful and thorough work that is done by the Pennsylvania survey. We wish that our Southern States could show similar work.



The outlook is good for a fair trade in the lumber and building industries in this city, and during the week the movement has been of a fairly active character. At



all saw-mill sections along the lines of railroad terminating here a number of mills have resumed operations, and it is safe to say that the coming winter will show a larger volume of business than last year. Business at the Builders' Exchange has been rather quiet during the week, but there is a good demand for lumber for building purposes, and mechanics of this city have work sufficient to keep them fully employed until next summer. The building industry has been unusually good during the current year, and the prospects are for even a better year's business in 1894. Lumber is fairly active, and exports of pine and other staple Southern woods are among the prominent features of the business of this port. A contract has just been signed by a prominent firm for 2,500,000 feet for South American and European shipment. There has been an excellent demand from South and Central America of late. Messrs. Hotard & Lawton, of the Algiers saw mill, have just been awarded the contract to furnish the government 120,000 feet of clear lumber to be used in building three barges for the river commission, engineer department. Receipts of lumber continue fair. The following table shows the receipts of building material at the Mechanics, Dealers and Lumbermen's Exchange for the week ending November 17, 1893, as compiled by Secretary Dirmeier:

Material.	This week.	Sept. 1 to Nov. 17.	
		1892-93.	1891-92.
Lumber.....	1,399,000	19,215,261	23,923,477
Shingles.....	153,000	1,588,250	1,117,000
Laths.....	50,000	365,000	1,918,300
Brick.....	507,000	5,416,500	8,065,500
Sand.....	6,775	131,180	144,820
Lime.....	3,450	35,200	34,635
Cement.....	130	33,915	39,960
Fire-brick.....	7,600	130,200	108,000
Oak staves.....	92,400	1,460,359	1,254,281
Cypress staves.....	149,900	1,597,041	1,156,300

#### Beaumont.

BEAUMONT, TEXAS, November 20.

The improvement in the lumber industry in this section has been quite pronounced during the month, and trade, both at this point and throughout the saw-mill section of southeastern Texas, is now fairly active, with a good general demand. Dealers are purchasing much more freely, and a number of orders have been received from the Territory. At retail points dealers are increasing their stocks and are preparing for a good winter's trade. A few orders from local dealers for bill stuff have been received, and the volume of business for the past week is considerably larger than usual. Deep water at Sabine Pass is the principal topic discussed here at present, and the lumbermen in this section anticipate a large increase in their shipments to points along the coast of Texas and Mexico and also to Cuba. A branch road of the Southern Pacific runs from this place down to Sabine Pass and also in a northerly direction from Beaumont into the heart of the lumber regions. There are a number of steam saw and planing mills along the line of this road, some of which are very extensive, and the output of these mills will be greatly increased by the opening of the Pass. Mr. W. A. Fletcher, president of the Texas Tram & Lumber Co., and Mr. John N. Gilbert, general manager of the Beaumont Lumber Co., left on the 14th inst. for the West Indies. Their object is said to be the opening up of markets on the islands for yellow pine and ascertain the opportunities for obtaining return cargoes of the products of the fertile groups of islands they may visit. The lumber strike at Orange has been declared off, and all the mills are running with full crews. The Orange Lumber Co., the D. R. Wingate Lumber Co., as well as the L. Miller Shingle Co., are running their mills, while T. Bancroft & Sons, Litcher & Moore Lumber Co. and

A. Gilmer have their planing mills going at full speed. Stocks of dry lumber at nearly all the mills are larger than usual at this season of the year, sales during the fall having been lighter than for some seasons past. The mills running at present have an ample stock of logs to cut from, and were all purchased before the decline in lumber, and must be cut first to make boomage room for logs expected by the next rise in the Sabine. At Westlake and Lake Charles, La., there is considerable activity in lumber, and mills are generally well supplied with orders.

#### Missouri Lead and Zinc.

JOPLIN, MO., November 21.

There is a better outlook in the mining industry of southwest Missouri, and the metal markets are firmer, ores showing a marked advance during the past week. The price of lead ore opened at \$18.50 per thousand, and was well maintained at that figure during the week. The price of zinc ore advanced also, and on Friday touched \$20.00 per ton, at which price heavy sales were made for this week's delivery. At Webb City and Cartersville and mines here the output has been the largest since last winter, and sales correspondingly large. Zinc ore at Webb City advanced \$2.00 per ton, selling at \$20.00, and lead ore sold up from \$18.00 to \$18.50 per thousand pounds. Heavy sales have been made for this week's shipments, amounting to fully 2,000,000 pounds of zinc ore. The improvement in prices of ores, and especially the tone of the lead market, is encouraging miners to open up camps that have been idle for some time past. The following report represents the sales at the various districts:

Districts.	Zinc Pounds.	Lead Pounds.
Joplin.....	1,269,180	366,970
Webb City.....	1,045,220	115,580
Cartersville.....	1,656,820	150,410
Galena.....	1,120,000	165,000
Zincite.....	132,550	4,100
Oronoga.....	.....	49,570
Alba.....	42,000	.....
Total.....	5,276,070	854,630

District value, \$61,601.20.

#### Unsatisfactory Condition of Texas Wool Interests.

Mr. A. E. Shepard, who is said to be one of the leading wool-growers of Texas, takes a very gloomy view of the wool situation on account of the tariff agitation, and in an interview in the San Antonio Express says: "With wool selling now in the market of San Antonio at from five to seven cents per pound, the outlook for the wool-grower is fearfully bad. It simply means they must go out of the business, as no man in this county can grow wool at these rates and live, not even if he had his land given him to run them on. Now, it seems to me the buyers have anticipated free wool, for there is no earthly reason for such low prices except upon that basis, and even then it would hardly go as low as that to be upon an equality with foreign wool of the same quality. For the last year or two we have had but little benefit from our protective tariff, at least not to exceed over two-thirds of what it intended to give us, for the reason Australia has been sending us only the choicest portions of each fleece, the belly, legs, neck and hip not being taken off in what they call skirting, thus leaving only the choicest portion of each fleece to be shipped to us, with an enhanced value of at least ten cents per scoured pound, and in this manner evading the duty that should have been paid. Lots of this same wool has been sold in Philadelphia in the past season at from forty to forty-two cents per pound, and the identical same kind of wool, equal in every respect, from Ohio and Michigan had to be sold at from twenty-one to twenty-three cents in the same market.

"It does not seem possible that the party

now in power would really put wool, iron, lumber and many other articles on the free list, as it will simply mean their overthrow and destruction by such a policy. I think and hope President Cleveland is too pure an American to turn over to foreigners the commerce of this country, for that is just what such a course means. Free raw materials means in a very short time free manufactures and free goods and a shut-down of all kinds of mills, etc., thus throwing millions of men out of employment. This immense mass will arise and overthrow the people and party that caused it."

#### Southern Textile Notes.

THE Meridian Knitting Mills, of Meridian, Miss., will resume operations shortly with additional machinery. Twenty-five new full automatic knitting machines will be put in, an order for same having been placed with the Franz & Pope Knitting Machine Co., of Bucyrus, Ohio. The mills heretofore have been using the semi-automatic, but the full automatic have, it is claimed, a greater capacity and require less labor. J. D. McInnis is president of the company, and W. L. Fewell, secretary and treasurer.

THE Gastonia Manufacturing Co., of Gastonia, N. C., will put in its mill a 200-light electric plant, and contract has been awarded to J. E. Duval, electrical engineer and contractor, of Charlotte.

A SILK mill will shortly be started at Keysville, Va., by the Virginia Silk Mill Co. Mr. Arthur Pedley, of Paterson, N. J., is vice-president of the company, and he is now at Keysville putting the machinery in place. The mill will commence operations in about four weeks.

THE semi-annual meeting of the stockholders of the Fort Mill (S. C.) Manufacturing Co. was held at Charlotte, N. C., last week. General business matters pertaining to the plant were discussed.

THE Peacher Mills Co., of Peacher Mills, Tenn., is about to make some improvements at its plant and put in new machinery. A water system for fire protection will be constructed and burr-pickers, feeders, cards, etc., added to the mill.

THE Victoria Cordage Co., of Dayton, Ky., under its new management, will resume operations about January 1.

THE Hermitage Cotton Mills, at Reidsville, N. C., have resumed operations after a shutdown for repairs. The seamless bag factory of the Boyd Manufacturing Co., which weaves the entire spinning product of the Hermitage plant, has also resumed and is receiving substantial encouragement in the way of orders. One order received from the West last week was for 19,700 bags.

THE Scotland Neck Knitting Mills, of Scotland Neck, N. C., have resumed operations after a stoppage of several weeks.

AT a meeting of the stockholders of the Southern Branch Development Co., held last week at Norfolk, Va., a proposition was made by some capitalists to build a cotton mill on the company's property near Berkeley. The matter is now under consideration and will very likely be brought to a successful issue.

THE foundation for the extension to the Newberry Cotton Mills, at Newberry, S. C., is being pushed forward rapidly by Contractor Davis, who is in charge. This enlargement was decided upon last spring and will give the entire plant a capacity of 25,000 spindles, at present only 10,880 being in operation. Five thousand spindles will be put in at first, and the number increased as it is deemed advisable. R. L. McCaughrin is president of the company; T. J. McCrary, treasurer and general manager, and Jefferson Higgins, superintendent of the mill.

#### Renewed Talk of Bessemer Ore Consolidation.

A dispatch from West Superior, Wis., says: "A big iron pool is about to be formed by the consolidation of the Minnesota Iron Co.'s interests with those of the Rockefeller syndicate. The former company is moving to control all the Bessemer mines and ores in the county. When former negotiations were pending the Minnesota Company offered the Merritts \$8,000,000 for their Mesaba interests. This was refused, but went in with the Rockefellers. The Minnesota Iron Co. is one of the largest concerns of its kind in the world. Its own capital is \$20,000,000 and it is in combination with fully \$50,000,000 more. It is expected that the two syndicates will enter into combination, at least so far as to control by agreement all prices of Bessemer ores."

#### TRADE NOTES.

HENRY DISTON & SONS, of Philadelphia, have opened a repair shop for circular saws and kindred goods at 110 Tchoupitoulas street, New Orleans.

THE Gleason & Bailey Manufacturing Co., Seneca Falls, N. Y., is building two improved hose wagons for the city of Tampa, Fla. The same concern is building a steel hook-and-ladder truck for the town of Rouse's Point, N. Y.

THE S. Obermayer Co., Cincinnati, Ohio, manufactures the Obermayer-Paquet patent steel-wire brush for cleaning castings, for which especial merit is claimed in efficiency and durability. The wire does not crystallize or break, but wears down to the block.

THE Jeffrey Manufacturing Co., of Columbus, Ohio, reports that the demand for its line of manufacture keeps up, and that it is running its plant full. Its steel cable conveyor has opened up a new field, so that with its already large line of conveying specialties it is looking for a continued as well as an increased demand for its manufacture.

THE Grand Trunk Railroad Co. has placed an order with the Morton Safety Heating Co., of Baltimore, Md., for the equipment of a number of its passenger coaches with the Morton system of stored heat. This is the sixth order received by the Morton Company from that railroad. The company is now at work equipping 100 cars of the Lake Street Elevated Railroad, of Chicago, with its system, and expects to complete the work during the first week in December.

THE Southern Pacific Railroad Co. will build a new cotton shed at New Orleans 120 feet wide and 350 feet long. They have placed the contract with the Berlin Iron Bridge Co., of East Berlin, Conn. The building will be entirely of iron, the sides being made with the Wilson patent rolling shutters. The new car barn for the Easton Traction Co. at Easton, Pa., will be built by the Berlin Iron Bridge Co. It will be entirely of iron, sixty-four feet in width and 200 feet in length.

THE Wyckoff patent wood water pipe has been upon the market for a long number of years, each of which has marked a notable increase in its use and a substantial growth in the business of the manufacturers, Messrs. A. Wyckoff & Sons, Elmira, N. Y. The merit of this form of water pipe is evident from the exceptional service shown where it has been in use for lengthy periods of time, from ten to twenty-five years, and still in good condition. It may be strongly recommended for general water-supply purposes.

JOHN C. N. GUIBERT, 115 Broadway, New York, manufacturer of the swinging hose-rack, has lately furnished racks to be used in connection with interior hose equipment in the following buildings: Abbey Theatre, Metropolitan Opera-House and Criminal Court building, New York; Dominican Convent, Astoria, L. I.; Philadelphia National Bank, Philadelphia, Pa.; Young's bakery, Utica, N. Y.; Barber & Co.'s factory, South Framingham, Mass.; Odd Fellows' building, Cambridge, Mass.; Maine Insane Hospital, Augusta, Me.; Geo. Blome & Son's factory, Baltimore, Md.; Franklin Publishing Co.'s building, Atlanta, Ga.

A RECENT issue of the Cincinnati Commercial-Gazette contains an interesting sketch of the career of Mr. Thomas P. Egan, the founder of the Egan Co., and the present president of the J. A. Fay & Egan Co., the great builders of wood-working machinery in Cincinnati, Ohio. Few men have risen to such a position of business prominence in so striking a manner as is shown by the career of Mr. Egan, whose business in 1875 was represented by a shop of three employees, including himself. He is now the head of what is probably the most extensive woodworking machinery concern in the world, with a capital of \$2,500,000 and over 400 employees.



# CONSTRUCTION DEPARTMENT.

**WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.**

\* Means machinery is wanted, particulars of which will be found under the head of "Machinery Wanted."

† In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

## ALABAMA.

**Bessemer—Coal Mines.**—T. R. Collins has leased coal fields four miles from Bessemer and organized a stock company to open mines.

**Guntersville—Woolen Mill.**—A report states that M. Craven, of Springfield, Mass., was in Guntersville last week looking over the field with a view to erecting a woolen mill.

**Huntsville—Sewer System.**—Preliminary survey for the city's proposed sewer system has been completed and estimates will now be made and submitted to the city council for consideration. For further particulars address the mayor.

**Mobile—Artesian Well.**—Elder Bros. have finished the artesian well which they have been sinking for the Gulf City Oil Mills. It is 700 feet two inches deep, six inches in diameter, and sends out 400 gallons of water per minute.

**Mobile—Sash and Door Factory.**—F. C. Turner & Co. are now making preparations to rebuild their recently burned plant.

**Opelika—Cotton Mill.**—An effort to organize a stock company to build a cotton mill has been started.

## ARKANSAS.

**Hot Springs—Cotton Mill.**—The Spring Creek Manufacturing Co., of McKenzie, Tenn., has made a proposition to the Chamber of Commerce for the establishment of a cotton mill in Hot Springs.

**Little Rock—Electric-light Plant.**—An ordinance has been introduced in the city council appropriating \$30,000 for the erection of a new electric-light plant. For further particulars address the mayor.

**Little Rock—Tobacco Factory.**—H. C. Hinton is in correspondence with T. F. Williamson and Thos. Parish, of Winston, N. C., regarding establishing a tobacco factory in Little Rock.

**Little Rock—Hub and Spoke Factory.**—The Beck & Corbett Iron Co., of St. Louis, Mo., has made the Commercial League a proposition for the establishment of a hub and spoke factory in Little Rock.

**Little Rock—Tobacco Factory.**—The Commercial League has a plan in hand for the establishment of a tobacco factory.

**Little Rock—Buggy Works.**—The Commercial League is negotiating for the establishment of a buggy works. The plant in question is now located at Dayton, Ohio, by R. H. Rahn. A \$60,000 stock company is proposed, of which Mr. Rahn will take \$40,000.

**Little Rock—Electric-light Plant.**—The board of public affairs has decided to advertise for bids for the new electric-light plant which the city intends establishing, limiting the time to thirty days.

**Little Rock—Ice Factory and Cold-storage Plant.**—The Little Rock Ice Co. has just completed an addition to its plant, costing \$50,500, which increases the plant's capacity by seventy-five tons; a cold-storage warehouse was also added.

## FLORIDA.

**Barlow—Phosphate Plant, etc.**—The Alafia River Mineral & Land Co.'s phosphate plant on Turkey creek will be thoroughly overhauled and put in operation. New dyes and washers will be put in.

**Live Oak—Saw Mill.**—David Jones has purchased the McCormick saw mill at master's sale.

## GEORGIA.

**Elberton—Electric-light and Water Works.**—A bill to allow Elberton to build electric-light and

water works has been introduced in the State legislature.

**Savannah—Drugs, Paints, etc.**—Joseph W. Preston, Julia A. Adams and A. C. Wright have incorporated the Adams Drug, Paint & Oil Co. to deal in and manufacture drugs, paints, etc. The capital stock is \$10,000, all paid in; privilege of increasing to \$50,000.

## KENTUCKY.

**Benton—Electric-light Plant.**—J. R. Lemon is the prime mover in the electric-light project lately mentioned and can be addressed for information.

**La Grange—Canning Factory.**—Taylor & Duncan will put in a vegetable-canning factory next month.\*

**Lexington—Telautograph System.**—C. H. Stoll has organized a company to introduce the Gray telautograph in Kentucky and will put a system in operation as soon as the instrument can be manufactured.

**Maysville—Canning Factory.**—A. Lorenze, of Fort Wayne, Ind., is endeavoring to organize a company in Maysville to erect a canning factory.

**Whitley County—Coal Mines.**—It is reported that a \$200,000 stock company has been formed at Pittsburgh, Pa., having for its purpose the development of the Bird's-eye canal coal fields in Whitley county.

**Winchester—Pottery.**—The Winchester Steam Pottery has made extensive improvements to its plant lately and resumed operations.

## LOUISIANA.

**New Orleans—Rice Elevator.**—The National Rice Manufacturing Co. has just completed its new rice elevator of 2400 bushels capacity per hour.

**New Orleans—Saw and Planing Mill.**—W. W. Carre has decided upon erecting a new saw and planing mill with a daily capacity of from 40,000 to 50,000 feet of lumber. Site has been secured, plans are now being prepared and the machinery is being negotiated for. The cost of the new plant will be between \$65,000 and \$85,000 and it will be completed in February.

**St. Mary—Cold-storage Warehouse.**—Dr. Gates contemplates the erection of a cold-storage plant addition to his ice factory.

## MARYLAND.

**Baltimore—Brass and Metal Works.**—The Curtis Bay Brass and Metal Works was incorporated recently, and has built at Curtis Bay a large foundry for the manufacture of journal bearings and brass castings of all kinds. Finished work will not be turned out at first. D. R. Steele is president; J. H. Farlow, secretary and treasurer, and A. S. Eberman, W. G. Gischel, Dr. Samuel S. Frank and Edward Letzer, directors.

**Baltimore—Electric Plant.**—The Maryland Electric Co., J. Frank Morrison, manager, has determined upon building a large plant on the water front to supply electric light, heat and power. The plant will be equipped to a capacity equal to 12,000 horse-power, and the company will invest about \$2,000,000 in it. Of this amount \$1,000,000 is to be bonds and \$1,000,000 stock. Negotiations for the site are now being completed. The General Electric Co., of New York, is backing this affair.

**Baltimore—Electric-power Plant.**—The City & Suburban Railway Co. is preparing to build its new power-house on Pratt street. The plant will produce 2500 horse-power. All contracts have been let.

**Baltimore—Publishing.**—Edward J. McCleavy, James Duncan, S. L. Richards, Isaac D. Jones and Charles Barney have incorporated the Trade Unionist Publishing Co. to conduct a printing and publishing business. The capital stock is \$10,000.

**Baltimore—Coal Dealers.**—Edward D. Onion, Lewis J. Onion, William G. Wilson, William C. Kirby and John Patten have incorporated the E. D. Onion Coal Co. to deal in coal. The capital stock is \$20,000.

**Baltimore—Electric Plant.**—The new Wenstrom Electric Co., manufacturers of electrical machinery, intends also to engage in a general electric business and supply electric-power. The concern has a water-power on Gwynn's falls equal to 500 horse-power.

**Belair—Fire-alarm System.**—The town commissioners have decided to equip Belair with an electric fire-alarm system. Frank Bateman can give information.

**Boonsboro—Grain Elevator.**—A project is afoot for the erection of a grain elevator. A. C. Huffer, G. A. Davis and N. G. Thomas are interested.

**Cumberland—Brick Works.**—A large plant for the manufacture of bricks will be erected at Williams' Station, near Cumberland, to have a capacity of from 80,000 to 100,000 per day. J. J.

Hoblitzell, of Meyersdale, Pa., has secured 500 acres of land as a site for the plant.

**Laurel—Water Works.**—The agitation amongst the citizens for a water-works plant is still kept up.

**Wye Mills—Creamery.**—E. H. Eshelin may rebuild his creamery reported as burned.

## MISSISSIPPI.

**Barnett—Dry-kilns.**—The Kirkpatrick Manufacturing Co. will rebuild its burned dry-kilns.

**Biloxi—Lumber Mills.**—The John A. Harkness & Sons Building & Milling Co. has been incorporated to transact a general milling and lumber business with a capital stock of \$5000. The incorporators are John R., Wm. T., Giles A. and I. L. Harkness.

**Laurel—Dry-kilns.**—Eastman, Gardiner & Co. are building two dry-kilns of 60,000 feet capacity daily.

**Magnolia—Planing Mill.**—A new planing mill is under way. The machinery has been purchased.

**McComb City—Water Works, etc.**—The Illinois Central Railroad is constructing water works, new steam dryhouse, new coal shutes and making other improvements.

**Meridian—Sewer System.**—The city held its election on November 14 and 15, and the issuance of the \$100,000 of bonds for sewers was decided upon.

**Meridian—Knitting Mill.**—Twenty-five new knitting machines will be put in the Meridian Knitting Mills, and the order has been placed.

**Vicksburg—Grist Mill and Gin.**—The Advance Gin & Mill Co., which several months ago installed a grist mill and gin, is now contemplating putting in a cane mill and evaporator.

**Vicksburg—Ice Factories.**—The Consumers' Ice Co. and the Floweree Ice Co. have consolidated.

## MISSOURI.

**Clinton—Water Works.**—The Home Water Works Co., recently noted as incorporated, has bought the water works of Clinton and will considerably improve same, including laying new mains, constructing new standpipe, etc. W. L. Crow, of New York city, is president, and W. A. Foote, of Clinton, secretary.

**Kansas City—Hides.**—Simon Speyer, Leo Hirsch, Lena Hirsch and others have incorporated the Joseph Hirsch Hide Co. with a capital stock of \$4500.

**Neosho—Mining.**—George Muenig, of Joplin, and Philip Pflug, of Newton county, have secured control of a tract of forty acres of mineral land in Neosho county and will develop same.

**St. Louis—Clothing.**—Harry N. Marx, Edmund J. Marx and Biermann Haas have incorporated the Marx & Haas Jeans Clothing Co. with a capital stock of \$250,000.

**St. Louis—Mining.**—Stephen Peck, N. D. Allen, John W. Hill, J. W. Avery and Severe Beffa have incorporated the Silver Reef Mining Co. with a capital stock of \$100,000.

**St. Louis—Coffin Works.**—The St. Louis Coffin Co.'s plant was not destroyed by fire, as recently stated. Only a warehouse was damaged.

## NORTH CAROLINA.

**Charlotte—Gold Mines.**—The Means mine, near Charlotte, which has been idle for some years, will soon be worked again. Preparations are now being made and machinery is being put up, including a stamp mill. J. A. Coleman will be assistant superintendent at the mine.

**Charlotte—Mineral Developments.**—The Charlotte Mineral Co. has been organized with R. M. Miller, president; Thomas Grier, vice-president, and J. H. Carson, secretary and treasurer. The company's purpose is to buy, sell or develop mining properties.

**Charlotte—Sulphuret Plant.**—A plant for treating sulphurets will be built on Chincapin Hill, near Charlotte and the Means mine. F. W. Carnahan, of Knoxville, Tenn., will operate it.

**Gastonia—Electric-light Plant.**—The Gastonia Manufacturing Co. has placed contracts for an electric-light plant for its cotton factory.

**Greensboro—Handle and Spoke Factory.**—F. S. Eldridge has leased the Greensboro Spoke and Handle Factory, and will operate same.

**Mt. Olive—Canning Factory, etc.**—John R. Smith has purchased the Crescent Canning Co.'s factory and will operate it; will also put in a crate factory.\*

**Reidsville—Shuttle-block Mill.**—J. E. Kanoy is erecting a shuttle-block mill.

**Whittier—Saw Mill.**—P. P. McLean has started a saw mill near Whittier.

## SOUTH CAROLINA.

**Cowpens—Flour Mill.**—A. S. Waters is erecting

an 8 to 10-barrel roller flour mill near Cowpens.

## TENNESSEE.

**Chattanooga—Tobacco Factory.**—J. M. Goad, W. P. D. Moross and C. A. Moross have organized the Moross-Goad Tobacco Co. to handle leaf tobacco and manufacture plug tobacco.

**Chattanooga—Woodworking Plant.**—The Central Manufacturing Co., reported last week as erecting plant, has been granted a charter, with the following incorporators: D. W. Hughes, W. B. Hughes, W. F. Story, W. L. Dibrell, W. Cooper and L. H. Hill.

**Humboldt—Flour Mill.**—E. W. Ing & Sons will at once rebuild their roller flour mill, which was destroyed by fire several months ago. Contract for the buildings has been let to W. W. Brown, and for the machinery to the Case Milling Co., of Columbus, Ohio. The new mill will cost \$6000, and is to be completed by February 1.

**Knoxville—Street-car Rail Works.**—A manufacturing firm of Charlestown, R. I., has written to W. B. Palmer, of the Knoxville Electric Railway, relative to establishing works for making patent street-car rails from old steel rails. The communication states that the reworking of the old rails would cost \$3.00 per ton, and that such a plant could be built for \$10,000.

**Memphis—Car Works.**—The Litchfield Car Co.'s plant, when removed to Memphis, will be operated as the Memphis Car & Foundry Co.

**Nashville—Tobacco Company.**—E. A. Carsey, John A. McEwen, M. T. Bryan, S. D. F. McEwen and D. R. Stubblefield have incorporated the Carsey-McEwen Tobacco Co.

**Peacher's Mills—Woolen Mill.**—The Peacher's Mills Co. will equip a private water system and put some new machinery in its woolen mill.

**Sharon—Planing Mill.**—Shannon & Priestly have completed their new planing mill of 11,000 feet capacity daily, and operations have commenced.

**Sparta—Publishing.**—F. T. Fancher, W. F. Story, W. L. Dibrell, W. Cooper and L. H. Hill have incorporated the Sparta Publishing Co. to publish a newspaper.

## TEXAS.

**Ambia—Cotton Gin.**—Wilson Bros. intend rebuilding their cotton gin recently destroyed by fire.\*

**Columbia—Bridge.**—The commissioners of Brazoria county have determined to construct a bridge across the Brazos river at or near Columbia.

**Galveston—Commission, etc.**—A. C. & K. A. Hamilton, of Galveston, and W. M. Hamilton have incorporated the Hamilton Produce & Commission Co. with a capital stock of \$20,000.

**Georgetown—Electric-light Plant.**—A. S. Fisher, W. K. Makemson, W. L. Vining and J. W. Robertson have organized a company for the purpose of erecting an electric-light plant. The capital stock is placed at \$100,000. The company has chartered under the name of the Georgetown Water & Electric Light Co., and the city has transferred to this new concern the water-works system. W. K. Makemson is president; A. S. Fisher, vice-president, and E. E. Taylor, secretary.

**Karnes City—Artesian Well.**—The artesian well company has resumed work on its well and expects to strike water in 300 feet more. The well is now down 1200 feet.

**La Nana—Lumber Mill.**—The La Nana Lumber Co. is actively engaged in rebuilding its mill which was burned several months ago.

**San Antonio—Broom Factory.**—William Ruppertsberg has established a broom factory.

## VIRGINIA.

**Ashland—Corn Mill.**—W. C. Newman, of Ellersson, is operating a corn mill at Ashland and contemplates putting in a hominy mill.\*

**Berkeley—Cotton Mill.**—A proposition has been made to the Southern Branch Development Co. for the erection of a cotton mill.

**Berkley—Saw Mill.**—Whippell & Denby are putting new boilers in their saw mill.

**Buchanan—Can Factory.**—Botetourt county packers will hold a meeting on November 28 to consider organizing a company for the manufacture of tin cans and cases.

**Ellerson—Flour Mill.**—W. C. Newman has started his roller-process flour mill near Ellerson.

**Keysville—Silk Mill.**—The Virginia Silk Mill Co. is establishing a plant at Keysville. The machinery will be put in at once and operations commenced soon. Arthur Pedley, of Paterson, N. J., is vice-president.

**Lynchburg—Brewery.**—It is reported that the Virginia Brewing Co., of Roanoke, contemplates removing its brewery to Lynchburg. The plant has a yearly capacity of 25,000 kegs.



**Pocahontas—Printing and Publishing.**—The Blue field Printing Co., of Bluefield, W. Va., will establish printing works at Pocahontas and publish a newspaper.

**Strasburg—Pressed-brick Works.**—Machinery for the manufacture of pressed brick has been added to the Strasburg Steam Pottery and Brick Yard.

**Wakefield Station—Wharf.**—A new wharf is to be built at Bridge's Creek, on the Potomac river, 1050 feet long, of iron screw piles and timber deck. John M. Wilson has made contract with Hathaway & Co., of Philadelphia, for its construction.

#### WEST VIRGINIA.

**Bluefield—Printing and Publishing.**—Brounsefield & Aulick will establish printing works and publish the *Telegram*.

**Kyle—Coal Tipple.**—The Lynchburg Coal & Coke Co. is building a new coal tipple and approach.

**Parsons—Electric-light Plant.**—T. B. Gould, S. P. Harford, J. S. Dengel, J. L. Palmy and Cliff Comb have incorporated the Parsons Electric Light Co. for the purpose of lighting the city. The authorized capital stock is \$100,000.

**Wheeling—Iron Mill.**—While the Whitaker Iron Co. shall probably rebuild its burned mill, no definite plans have been formulated as yet.

**Wheeling—Car Company.**—Charles J. Ely, Frederick Malter, F. J. Ball, James P. Morgan and Frederick Ely have incorporated the Charles J. Ely Car Co. with a capital stock of \$1000; privilege of increasing to \$300,000.

**Wheeling—Ice Factory.**—The new company to build an ice factory, lately reported, is in the hands of H. Q. Wheat, and he can furnish information.

**Wheeling—Mercantile.**—G. W. Bremer, Milton W. Mabis, Oswald Schwiber, J. E. Dudley and Mrs. A. Mabis have incorporated the Bremer-Mabis Co. to deal in confectioneries and groceries. The authorized capital is \$100,000.

#### BURNED.

**Americus, Ga.**—Burrell Joiner's cotton gin, near Americus.

**Barnett, Miss.**—The Kirkpatrick Manufacturing Co.'s dry-kilns.

**Carolina, Tenn.**—Bomer Bros.' cotton gin, saw mill, etc.; loss \$7000.

**Center Point, Ark.**—J. A. Hughes's dry-kiln.

**Cordele, Ga.**—A. J. Fenn's grist mill and cotton gin, three miles north of Cordele.

**De Soto, Ga.**—H. B. Pound's cotton gin, near De Soto.

**Havana, Ala.**—W. W. Martin's cotton gin, near Havana.

**Hillsboro, Texas.**—Weathered & Schuyler's cotton gin.

**Hooks's Switch, Texas.**—The Hooks Lumber Co.'s plant damaged by boiler explosion.

**Hot Springs, Ark.**—The Ozark and Willard Hotels; loss estimate \$50,000.

**Independence, Texas.**—A cotton gin near Independence, property of the T. C. Clay estate.

**Kansas City, Mo.**—The Western Warehouse & Storage Co.'s building; loss estimate \$150,000.

**Memphis, Tenn.**—The Tennessee Midland freight depot and seven box cars; loss \$7000.

**Memphis, Tenn.**—Grace Episcopal Church.

**Memphis, Tenn.**—The Wetter Building, Y. M. C. A. gymnasium and Memphis Loan Building; loss estimate \$150,000.

**Owensboro, Ky.**—The Chesapeake, Ohio & Southwestern freight depot, Hardy's and Jones's tobacco warehouses; loss \$75,000.

**Owensboro, Ky.**—Jay Hardie & Co.'s tobacco factory.

**Owensboro, Ky.**—Tobacco factory owned by E. A. Jonas, of Henderson, operated by Feland & Hughes.

**Richmond, Va.**—S. H. Hawes & Co.'s coal elevator; loss \$30,000.

**Richmond, Va.**—Buildings of the Kratz Fruit Co. and C. F. Taylor & Co.; loss estimate \$15,000.

**Richmond, Va.**—Warner, Moore & Co.'s barrel factory.

**Savannah, Mo.**—Buildings owned by Mrs. Julia Glazier and P. C. Shedrick; loss \$7000.

**Seymour, Texas.**—J. R. McLain & Son's flour mill; loss \$10,000.

**Shreveport, La.**—A. Hart's cotton gin, on Hart's Island, near Shreveport.

**Spartanburg, S. C.**—The Windsor Hotel, owned by Fielden Cantrell; only partly destroyed; loss \$5000.

**Tallahassee, Fla.**—George C. Gibbs's cotton gin and grist mill, one mile north of Tallahassee.

**Texarkana, Ark.**—John O. Doherty's warehouse; loss estimate \$8000.

**Waco, Texas.**—Central Hotel; loss estimate \$4000.

**Walnut Grove, Ala.**—A. T. Hopper's cotton gin, near Walnut Grove.

**Wye Mills, Md.**—E. H. Eshelin's creamery.

#### BUILDING NOTES.

**Baltimore, Md.—Normal School.**—Plans are being made for an addition to the State Normal School to be 40x80 feet and contain three rooms. The addition complete is to cost \$45,000. Frank E. Davis is architect.

**Baltimore, Md.—School.**—Contract has been let for a building for school purposes to cost \$40,000. It will be built of brick and is to be four stories high. Baldwin & Pennington are architects.

**Bluefield, W. Va.—Business Block.**—McCulloch Bros. will erect a three-story business block and are preparing plans for it.

**Bolivar, W. Va.—Hotel.**—A frame hotel to contain fifty rooms is to be built. A. B. Mullett & Co., of Washington, are architects.

**Brazoria, Texas.—Courthouse.**—The Brazoria county commissioners have voted in favor of erecting a courthouse to cost \$75,000. County Judge Bittel is interested.

**Canton, Texas.—Jail.**—Contract has been let for building the new jail, which is to cost \$20,000.

**Chesterfield, S. C.—Jail.**—The jail to be built at Chesterfield will cost \$10,000, and is to contain forty cells. Contract will be let the first Monday in December. Address W. C. McCreight, Cheraw, S. C.

**Dalton, Ga.—Business Block.**—The Showalter Printing Co. will begin the erection of a three-story building. The upper part will be used for a Masonic temple.

**Fort Myers, Fla.—Courthouse.**—Contract for building a courthouse to cost \$4650 has been let to M. S. Gonzalez and J. S. Wilson.

**Fortress Monroe, Va.—Hotel.**—John Fraser & Son, of Philadelphia, it is reported, are preparing plans for a hotel to be built at Old Point Comfort. It will be four stories high and built of pressed brick and stone.

**Gainesville, Fla.—Odd Fellows' Home.**—D. E. Cooper, of Gainesville, has the contract for building the Odd Fellows' Home. It will be two stories high, built of pressed brick and marble, and is to cost \$16,000.

**Greensboro, N. C.—School.**—The corporation will erect a school building in south Greensboro to cost \$9000. Address J. A. Pritchett.

**Greenville, Ga.—Church.**—It is reported that the Baptists will rebuild their church recently destroyed by a storm. Address pastor Baptist Church, Greenville.

**Guntersville, Ala.—Jail Work.**—T. A. Street will receive bids until December 4 for placing new cells in the county jail.

**Hawkinsville, Ga.—Church.**—Funds are being raised to erect a new Methodist church at Hawkinsville. It is to be built of brick.

**Houston, Texas.—Opera-house.**—A petition is being circulated in favor of erecting a building to contain a natorium, stores and an opera-house. William M. Rice is interested.

**Knoxville, Tenn.—Bank Improvement.**—The Holston National Bank will remodel a building it will occupy for banking business. It will be provided with new furniture and office fixtures. H. S. Misler, acting president, may be addressed.

**Lexington, Miss.—Courthouse.**—The board of supervisors wants plans for a new courthouse to cost \$20,000. The plans must be submitted by the first Monday in December. Address secretary board of supervisors.

**Memphis, Tenn.—Church.**—Funds are being raised to erect a new edifice on the site of Grace Church, recently burned. Address Rev. Dr. Patterson.

**Norfolk, Va.—Church.**—A site has been secured for an Episcopal church to be built at Lambert's Point in the suburbs.

**Piedmont, W. Va.—Asylum.**—A fund for building an asylum for widows and orphans is being raised by Knights of Pythias.

**Raleigh, N. C.—Hospital.**—A hospital for negroes is to be built at Raleigh of brick. It is to have seventy-two feet front. Contracts are partly let. Address the Rex Hospital trustees.

**Richmond, Va.—Hotel Improvement.**—The American Hotel is to be altered and improved at an expense of \$15,000. Mrs. Atkinson is the owner.

**Richmond, Va.—Armory.**—The committee in charge of the armory projected recommend an appropriation of \$100,000 to build a hall and armory combined.

**Social Circle, Ga.—School.**—The legislature has been asked for permission to issue bonds for building a school.

**St. Louis, Mo.—Warehouse.**—H. Hopmann will erect a brick warehouse 42x111 feet. Charles F. May is architect.

**St. Louis, Mo.—Dwelling.**—Lee & Wedemeyer have prepared plans for a residence for J. E. Luelben to be built of brick and granite. It will cost \$9000.

**St. Louis, Mo.—Dwellings.**—Lee & Wedemeyer have prepared plans for two residences of brick, marble and stone to cost \$10,000.

**St. Louis, Mo.—School.**—The city will erect a

school building of wood 30x60 feet to cost \$5000. John D. Paulus is architect.

**Suffolk, Va.—Armory.**—The Suffolk military companies will erect an armory.

**Temple, Texas.—Hotel.**—A hotel is to be built to contain twenty-five sleeping-rooms. Mr. Harvey, of Temple, will be the owner.

**Valdosta, Ga.—Hotel.**—It is stated land is to be secured for a hotel at Valdosta to cost \$50,000.

**Washington, D. C.—Office Building.**—Plans are being prepared for remodeling a residence on F street into a large office building. A. P. Clark, Jr., is architect.

**Washington, D. C.—Warehouse.**—The American Security Co. will erect an addition to its warehouse on Fifteenth street. The addition is to be fire proof and 20x106 feet. J. G. Hill is architect.

**Wheeling, W. Va.—Hotel.**—The idea of building a hotel to cost \$15,000 is being agitated. George Wood will give information.

**Williamson, W. Va.—Hotel.**—W. S. Bevins, it is reported, will erect a hotel.

#### RAILROAD CONSTRUCTION.

##### Railroads.

**Alexandria, Va.**—The name of the company which proposes to build the electric road from the Potomac aqueduct bridge to Falls Church and Alexandria is the Washington, Falls Church & Great Falls Railway Co. J. E. Clements, 1321 F street, Washington, is interested.

**Bastrop, Texas.**—The Austin, Bastrop & Colorado Railroad Co. has obtained right of way for its terminals in Bastrop.

**Boonsboro, Md.**—The electric railway between Boonsboro and Keedysville will be built strong enough to be used by steam locomotives. Rails weighing eighty-five pounds to the yard will be used. George A. Davis is one of those interested.

**Brunswick, Ga.**—A bill has been introduced in the legislature to incorporate the Georgia, La Grange & Northwestern, to extend from Brunswick to La Grange.

**Charleston, W. Va.**—A charter has been issued to the Brownstown & Coal River Railroad Co., which proposes to build a road from Brownstown to a point in Boone county. The capital is \$50,000 and the main office in Charleston. George Davis and R. W. Ewers, of Charleston, are interested.

**Chattanooga, Tenn.**—Receiver Burke, of the Chattanooga Southern, has been authorized to reballast and otherwise improve several sections of the line.

**Coketon, W. Va.**—C. J. Drishaw is interested in the construction of a railway line three miles in length from a point on the Baltimore & Ohio to lands he owns.

**Columbia, Texas.**—The project of building a bridge across the Brazos river is being agitated. If built the International & Great Northern Railroad Co. might pay part of the cost. T. M. Campbell, of Palestine, is general manager.

**Cumberland, Md.**—It is reported that the work of obtaining right of way for the proposed Baltimore & Cumberland road will be resumed in a few days. Hon. Henry G. Davis, Piedmont, W. Va., is one of the company.

**Elkton, Va.**—Work has commenced on a road to be built from Kendall & Flick's mines to a point on the Norfolk & Western road.

**Eureka, Fla.**—It is reported that a narrow-gauge railroad will be built from Eureka to Sparr. One of those interested is Mr. Ambler, of Jacksonville.

**Fort Meade, Fla.**—The Bell Phosphate Co. is preparing to build a railroad from its plant into Fort Meade. S. A. Simmons is manager.

**Harding, W. Va.**—The United States Coal, Iron & Manufacturing Co. may build a line six miles long from its mines at Harding to connect with the Baltimore & Ohio road at Belington.

**Hawesville, Ky.**—A project is under way for constructing a road from Hawesville to the coal fields five miles distant.

**Kingston, Ark.**—The King's River Railroad Co. has been organized to construct a road about forty miles long from Kingston, in Madison county, to a point on the St. Louis & San Francisco in Washington county. H. M. Coulter, of St. Louis, is interested.

**Louisville, Ky.**—President Thomas F. Hargis, of the Pineville, Mount Pleasant, Elkhorn & Big Stone Gap, states that the company expects to build the road within the next eighteen months. Bonds have been issued to construct the first section.

**Memphis, Tenn.**—The proposed extension of the Citizens' Electric Railway line to Binghamton suburb is to be completed by May 1.

**Monroeville, Ala.**—It is reported that arrangements are being made to begin grading on the Pensacola & Northwestern. S. N. Van Praag is president.

**Oakland, Md.**—The engineer in charge of the line is authority for the statement that work is to begin on the Oakland & Confluence road in the spring.

**Roanoke, Va.**—The Roanoke Railway Construction Co. has been organized to build a line from Roanoke to some point on the Chesapeake & Ohio or Baltimore & Ohio road. Robert H. Woodrum, of Roanoke, may be addressed.

**Rusk, Texas.**—Work has begun on the narrow-gauge line to be built by the State. It is to extend from the Texas penitentiary to the State lands, and will be four miles long. Governor Hogg, of Austin, is interested.

#### Street Railways.

**Baltimore, Md.**—The Baltimore, Canton & Point Breeze Railway Co. has asked for a franchise to lay tracks on certain streets of the city. Harry Welles Rusk is a member of the company.

**Knoxville, Tenn.**—The Cherokee Land Co., it is stated, will operate an electric road from the city to its lands across the Tennessee river. J. C. J. Williams, of Knoxville, is a director.

**Lynchburg, Va.**—The Rivermont Railway Co. will make a further extension of its lines from the present terminus to the union depot in Lynchburg. This is in addition to the extension previously noted.

#### MACHINERY WANTED

**If you desire to purchase machinery of any kind consult our advertising columns, and if you cannot find just what you wish, send us particulars as to the kind of machinery needed. We will make your wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. You will thus get all information desired as to prices, etc.**

**Boiler.**—The Frederick Brick Works, Frederick, Md., want a 100 horse-power boiler, new or in good order.

**Boiler.**—J. L. Wees, Room 802, Security Building, St. Louis, Mo., needs a boiler.

**Boring and Turning Mill.**—I. F. Davis, manager, Rome, Ga., will want an eight or 10 foot boring and turning mill (second-hand).

**Brick Machine.**—S. W. Ransom, Box 68, Mexico, Mo., wants a good horse-power mud-brick machine; second-hand one will do.

**Canning Factory.**—Taylor & Duncan, La Grange, Ky., want machinery for the equipment of a canning factory.

**Corn-crusher.**—S. S. Buxton, Waterloo, W. Va., will buy a corn-crusher soon.

**Corn-sheller.**—A. J. Baldwin & Co., Dawson, Ga., want to buy a corn-sheller which will shell without the corn having to be shucked.

**Crate Factory.**—John R. Smith, Mount Olive, N. C., wants machinery for a crate factory; second-hand.

**Cotton Gin.**—Wilson Bros., Ambia, Texas, want estimates on equipment for a cotton-ginning plant of several stands, except power and press.

**Dump Cars.**—The Standard Phosphate Co., Archer, Fla., wants at once 1½-yard 36-inch gage dump cars delivered at Archer.

**Electric-light Plant.**—A. J. Baldwin & Co., Dawson, Ga., want information and cost of electric lights for two square miles.

**Elevator.**—J. L. Wees, Room 802, Security Building, St. Louis, Mo., needs an elevator for a hotel.

**Elevator.**—The A. J. Showalter Co., Dalton, Ga., will want an elevator for a business building.

**Engine.**—John R. Smith, Mount Olive, N. C., wants an engine sufficient for a thirty horse-power boiler; second-hand preferred if in good condition.

**Gas Engine.**—S. A. Manshan, Steward's Mill, Texas, wants a light gas engine for shop work.

**Hominy Mill.**—W. C. Newman, Ellerson, Va., wants catalogs, prices and information on machinery for hominy mill.

**Lathe.**—A lathe, 9 to 10-foot bed, 18 to 20-inch swing, is wanted; nearly new. Address Box 155, Frederick, Md.

**Laundry Machinery.**—J. L. Wees, Room 802, Security Building, St. Louis, Mo., needs laundry fixtures for a hotel.

**Locomotive.**—The Standard Phosphate Co., Archer, Fla., wants at once a 10 to 13-ton locomotive, narrow-gauge, delivered at Archer.

**Molder, Planer and Matcher.**—The address of W. R. Gardy, mentioned in the BULLETIN of November 16 as wanting molder, planer and matcher, should be Oak Grove, Va., and not West Virginia, as printed.

**Planing Machine, etc.**—John R. Smith, Mount Olive, N. C., wants a planing and tongue and groove machine; second-hand preferred if in good condition.

**Pump.**—The Peacher Mills Co., Peacher Mills, Tenn., wants a pump for fire-protection outfit.

**Rails.**—The Standard Phosphate Co., Archer,



Fla., wants at once about twenty-five or thirty tons of 25 to 30-pound T rails delivered at Archer.

**Roofing, etc.**—The Standard Scale Co., Rome, Ga., is in the market for corrugated iron roofing and siding.

**Roofing.**—The Danville Gas Co., Danville, Ky., is in the market for iron roofing.

**Saw.**—The Church Cart Carriage Co., Meridian, Miss., is in the market for a band saw; second-hand one will do.

**Saw.**—John R. Smith, Mount Olive, N. C., wants a cut-off saw; second-hand preferred if in good condition.

**Saw Mill.**—John R. Smith, Mount Olive, N. C., wants a miniature saw mill; second-hand preferred if in proper condition.

**Shafting.**—The A. J. Showalter Co., Dalton, Ga., will want shafting, etc.

**Telephones.**—A. J. Baldwin & Co., Dawson, Ga., want estimates on cost of a telephone system of from twenty-five to thirty-five telephones.

**Tenoning Machine.**—The Standard Scale Co., Rome, Ga., is in the market for a tenoning machine.

**Textile Machinery.**—The Peacher Mills Co., Peacher Mills, Tenn., wants a burr-picker for wool, a feeder for first breaker cards, a measuring and bolting machine for jeans and a cutting machine for yarns.

**Tools.**—Albert H. Smith, Athens, Tenn., wants tools for repairing bicycles; also plumber's tools.

Em. S. Hughes, of Austin, Texas, wants to buy a small launch, steam or other motive power.

The A. J. Showalter Co., of Dalton, Ga., will want iron fronts for business buildings.

### The Hoosac Tunnel and the Berkshire Hills of Massachusetts.

Grand scenery is always an attraction in railroad travel. People traveling from the South or West to the great manufacturing districts of New England desire to catch a glimpse of the grand scenery of the Middle and Eastern States, and one of the first things to be considered is which line affords the best scenery. A little reflection will convince anyone that the celebrated Hoosac Tunnel Route, which is the short line from Chicago, St. Louis and the Southwest to Boston, is the best route to follow. No other line affords a tunnel ride, and to the traveler there can be nothing of more interest than the ride through this great tunnel, four and three-quarters miles long, illuminated in such a manner as to permit a view of the interior of this wonderful cavern extending through a mountain thousands of feet high. This great tunnel is ventilated by means of immense shafts running directly to the surface. The tunnel opens on the east side upon the beautiful Deerfield valley. It is the most charming landscape in all New England, and passengers are always delighted with it. After the ride through the tunnel the sudden burst into this panorama of nature is received with delight. The Hoosac Tunnel Route is one of the best managed in the country. Its passenger service is complete. Large and elegant buffet and parlor sleeping cars are run on all through trains. The passenger interests of the road are looked after by a competent corps of officials, and the splendid service offered is due in a great degree to their watchfulness and suggestions.

### Hunters' Rates—Dates of Sale and Limits.

The Cincinnati, Hamilton & Dayton Railroad will make hunters' rates as usual. To upper Michigan, Wisconsin and Minnesota tickets will be on sale September 20 to November 15, 1893, inclusive, with final return limit November 30.

To lower Michigan (Mackinaw City and south) November 1 to 25, inclusive; final return limit November 30, 1893.

To Missouri from September 20; return limit thirty days from date of sale, but not later than March 1, 1894.

To Mississippi from September 20; return limit thirty days from date of sale, but not later than April 30, 1894.

To Arkansas from September 20; return limit thirty days from date of sale, but not later than May 1, 1894.

### A New Through Sleeping-Car Line from Chicago to Seattle

Via the Chicago, Milwaukee & St. Paul and Great Northern Railways has been established, and first-class sleeping cars will hereafter run daily from Chicago at 10.30 P. M., arriving at Seattle 11.30 P. M., fourth day. This is undoubtedly the best route to reach the north Pacific coast.

For time-tables, maps and other information apply to the nearest ticket agent or address Geo. H. Heafford, general passenger agent Chicago, Milwaukee & St. Paul Railway, Chicago, Ill.

## TABLE OF CONTENTS.

	Page.
The Augusta Exposition.....	281
The South's Condition and Position.....	282
Cotton Manufacturing at Fall River in 1893.....	282
Developing Mobile Trade.....	282
Ramie as a Forage Plant.....	282
General Notes.....	283
Three Big Industrial Enterprises at Baltimore.....	283
Board of Trade for Nashville.....	283
Mobile's Banana Trade.....	283
More Steamships for the South.....	283
Galveston's Great Bridge Opened.....	283
Wants to Invest South.....	283
<b>RAILROAD NEWS:</b>	
Railway Annual Meetings.....	284
Opening the Sabine Pass.....	284
A Kentucky Project.....	284
Wants the Charter Revoked.....	284
Erlangers Want Their Roads.....	284
Virginia Wants Another Railroad.....	284
Louisville & Nashville and Port Royal.....	284
Trade Excursions to Savannah.....	284
To Be Sold at Auction.....	284
Improved Business.....	284
How the Rates Came Down.....	284
A New Sleeping-Car Line.....	284
Southern Railroad Notes.....	284
<b>FINANCIAL NEWS:</b>	
The Financial Situation.....	285
Interest and Dividends.....	285
New Financial Institutions.....	285
New Bond and Stock Issues.....	285
Failures and Suspensions.....	285
Opinions of the Day.....	285
The Plans Reported Abandoned.....	285
Financial Notes.....	285
Business Chances.....	285
<b>EDITORIAL:</b>	
Inducements to Manufacturers.....	286
A Wise Move.....	286
Free Discussion of Southern Matters.....	286
Another Victory for Electricity.....	286
Artificial Precious Stones.....	286
The Tariff Fight.....	287
<b>CORRESPONDENCE:</b>	
The Negro and Immigration.....	287
The Mobile & Dauphine Island Railroad.....	287
<b>COTTONSEED OIL:</b>	
Oil Ought to Sell Higher.....	288
Shipping Cottonseed Oil in Bulk to Europe.....	288
Combining for Higher Prices for Seed.....	288
The Markets for Cottonseed Products.....	288
Cottonseed-Oil Notes.....	289
Atlanta's Commercial Club.....	289
An Enterprising Land Company.....	289
<b>PHOSPHATES:</b>	
The Phosphate Question in South Carolina.....	289
Phosphate Markets.....	289
Phosphate and Fertilizer Notes.....	289
<b>MECHANICAL:</b>	
Bowsher's Combination Grinding Mill (Illustrated).....	290
Averaging Planimeter (Illustrated).....	290
To Encourage Southern Farmers.....	290
What a Southern Ship-Yard is Doing.....	290
A Rice-Milling Elevator.....	290
Large Output of Turpentine.....	290
<b>LUMBER:</b>	
Increasing Demand for Florida Cypress.....	291
Southern Lumber Notes.....	291
<b>Lumber Market Reviews:</b>	
Baltimore.....	291
Norfolk.....	291
Charleston.....	291
Savannah.....	291
Mobile.....	291
New Orleans.....	291
Beaumont.....	292
Missouri Lead and Zinc.....	292
Unsatisfactory Condition of Texas Wool Interests.....	292
Southern Textile Notes.....	292
Renewed Talk of Bessemer Ore Consolidation.....	292
Trade Notes.....	292
<b>CONSTRUCTION DEPARTMENT:</b>	
New Enterprises.....	293
Building Notes.....	294
Railroad Construction.....	294
Machinery Wanted.....	294

Will be sold at a bargain, and on easy terms, an electric-light plant and ice plant in buildings that adjoin and open into each other, which render running both together easy and economical; established over two years; possess liberal franchises; business continually increasing; plants now leased and pay 15 per cent. on price asked. Reasonable terms may be made with lessees if desired. Purchaser will have a chance to get running of city water works and telephones. Situated in a healthy, growing Southern town, with five railroads leading to all points. Address Jerome P. Chase, Florence, S. C.

### Pennsylvania Railroad—General Change in Train Schedule.

The Pennsylvania Railroad Co. announces that on SUNDAY, November 19, the fall and winter schedule of trains will be placed in effect.

The *Pennsylvania Limited* will be changed to leave Baltimore daily at 12.15 noon, arriving at Pittsburgh 10.10 P. M. and Chicago 11.00 A. M.

The Fast Line will leave Baltimore daily at 12.15 noon, arriving at Pittsburgh 11.30 P. M., where connection will be made daily for Cleveland and Columbus, and daily, except Saturday, for Chicago and Toledo.

The St. Louis, Cincinnati and Chicago Express will be known as the Chicago and St. Louis Express, and will continue to run on its present schedule, leaving Baltimore daily at 4.23 P. M., arriving at St. Louis 7.30 P. M.

The Western Express will be changed to leave Baltimore thirty minutes earlier, at 8.25 P. M. daily, arriving at Pittsburgh at 7.15 A. M., running through to Chicago.

The Southwestern Express will leave Baltimore at 8.25 P. M. daily.

No changes will be made in the schedule or equipments of the Pacific Express now leaving Baltimore at 11.50 P. M.

The Columbian Express and the Keystone Express will be withdrawn.

The present schedule of through trains will be continued between Baltimore, New York, Philadelphia, Washington and Boston, except that the New York and Washington LIMITED now leaving Baltimore at 2.43 P. M. will leave at 2.55 P. M. for Washington, and the New York and Southern Express now leaving at 2.40 A. M. for Washington, Richmond and Florida will leave at 2.20 A. M.

The 11.20 A. M. train to Washington will be withdrawn.

The Oxford Accommodation now leaving Calvert Station at 4.58 P. M. will leave at 4.20 P. M. The Philadelphia Express now leaving Union Station at 6.40 A. M. will leave at 6.30 A. M.

The Parkton Accommodation now leav-

ing Calvert Station at 12.00 noon will leave at 12.15 P. M. On Sundays this train will only run to Cockeysville.

The Sparrow's Point 3.00 P. M. train week days and the 7.20 P. M. Sundays from Calvert Station will be withdrawn, and the 9.25 P. M. daily will hereafter run on Monday, Wednesday and Friday. The 11.16 P. M. will run on Tuesdays Thursdays and Saturdays only.

### Winter Tourist Rates—Queen & Crescent Route.

Round-trip tickets to Lookout Mountain, Tenn., Florida and Georgia points, Asheville, N. C., New Orleans, La., Mexico City, Havana, etc., will be placed on sale by the Queen & Crescent route on and after November 1 at greatly reduced rates. The Queen & Crescent is noted as running solid vestibuled trains to Florida and New Orleans. Direct line to Southern tourist resorts. Finest trains in the South. Ask your agent for tickets over the Queen & Crescent; he will quote you rates, or you can address W. C. Rinearson, general passenger agent, Cincinnati, Ohio.

### Queen & Crescent Magazine.

The Queen & Crescent route is preparing to issue an elaborate publication in magazine form descriptive of the different sections of the South tributary to its lines.

Capitalists, tourists and business men are not likely to forget the Southern cities so long as the Queen & Crescent route can reach them with this artistic publication.

Copy of this magazine will be mailed to any address on receipt of ten cents in postage stamps. Address W. C. Rinearson, general passenger agent, Cincinnati, Ohio.

### Saxby's Query to Ingersoll.

This beautiful song, words and music (regular sheet music size), will be mailed to anyone enclosing five cents in stamps to D. G. Edwards, general passenger agent Cincinnati, Hamilton & Dayton Railroad, Cincinnati, Ohio.

## Sixty-Seventh Annual Report of the Baltimore & Ohio Railroad Co.

The Annual Meeting of the Stockholders of the Baltimore & Ohio Railroad Company was held yesterday at their office in the Central Building. Mr. Keverdy Johnson was called to the Chair. The Secretary of the Company, Mr. Andrew Anderson, acted as Secretary.

President Mayer submitted the Sixty-seventh Annual Report, for the fiscal year ended June 30, 1893. The Secretary read the Report to the Meeting. It is as follows:

### SIXTY-SEVENTH ANNUAL REPORT.

OFFICE OF THE BALTIMORE AND OHIO RAILROAD COMPANY, BALTIMORE, November 8, 1893.

To the Stockholders of the Baltimore and Ohio Railroad Company:

The President and Directors submit the following statement of the affairs of the Company for the year ended June 30, 1893.

The General Balance Sheet, the tabular statements of the General Auditor, and the report of the General Manager are appended.

### OPERATIONS FOR THE YEAR GENERAL INCOME ACCOUNT.

EARNINGS.	Year Ended June 30, 1892.	Year Ended June 30, 1893.	Increase.	Decrease.
From Freights.....	\$17,742,045 87	\$17,561,996 72	\$180,049 15	
Passengers.....	6,125,133 50	6,617,929 41	\$492,795 91	
Mail.....	568,032 69	586,879 07	78,846 38	
Express.....	657,189 41	659,631 05	2,441 64	
Miscellaneous.....	844,956 20	788,371 00	56,585 20	
<b>Total Earnings.....</b>	<b>\$25,877,357 67</b>	<b>\$26,214,807 25</b>	<b>\$337,449 58</b>	
<b>OPERATING EXPENSES.</b>				
General Expenses.....	\$1,682,768 31	\$1,797,500 06	\$114,732 65	
Conducting Transportation.....	9,984,906 94	10,590,664 15	605,757 21	
Maintenance of Equipment.....	3,584,928 69	3,383,487 81	\$201,440 88	
Maintenance of Way and Structures.....	3,180,352 03	3,261,328 93	80,976 90	
<b>Total Expenses.....</b>	<b>\$18,432,955 97</b>	<b>\$19,041,981 85</b>	<b>\$608,025 88</b>	
<b>Net Earnings from the operations of the property.</b>	<b>\$7,444,401 70</b>	<b>\$7,172,825 40</b>	<b>\$271,576 30</b>	
See Table A.	1,850,701 76	2,251,377 32	\$400,675 56	
Add Income from other sources, (See Table C.).....	\$9,295,103 46	\$9,424,202 72	\$129,099 26	
<b>Total.....</b>	<b>\$17,744 78</b>	<b>213,536 62</b>	<b>35,791 84</b>	
Deduct Net Earnings from Washington Branch.....	177,744 78	213,536 62	35,791 84	
<b>Available Income.....</b>	<b>\$9,117,358 68</b>	<b>\$9,210,666 10</b>	<b>\$93,307 42</b>	
From which deduct Interest on Bonded Indebtedness, Rentals, Taxes and Other Charges (See Table D. For Terms of Leases, see Table I.).....	6,535,211 75	6,697,225 43	162,013 68	
<b>Balance.....</b>	<b>\$2,582,146 93</b>	<b>\$2,513,440 67</b>	<b>\$68,706 26</b>	
<b>PAYMENTS.</b>				
Dividend on First Preferred Stock, 6 per cent.....	\$180,000 00	\$180,000 00		
Dividend on Second Preferred Stock, 6 per cent.....	120,000 00	120,000 00		
Dividend on Common Stock.....	312,428 75	624,922 50	\$312,493 75	
<b>Total.....</b>	<b>\$612,428 75</b>	<b>\$924,922 50</b>	<b>\$312,493 75</b>	
<b>Remainder.....</b>	<b>\$1,969,718 18</b>	<b>\$1,588,518 17</b>	<b>\$381,200 01</b>	
From which payments have been made to retire Bonded Indebtedness, viz:				
Principal Car Trust Bonds.....	\$250,000 00	\$250,000 00		
Principal Equipment Trust Bonds, Series A.....	100,000 00	100,000 00		
Principal Equipment Trust Bonds, Series B.....	200,000 00	200,000 00		
Payment to the City of Baltimore for the purchase of its interest in the Pittsburgh and Connellsville Railroad.....	40,000 00	40,000 00		
Cash Appropriations to Sinking Funds.....	58,057 81	58,057 81		
Somerset and Cambria Railroad Traffic Bonds.....	23,000 00	25,000 00	2,000 00	
Wheelage Car Trust payments.....	25,378 39	86,653 34	61,274 95	
<b>Total.....</b>	<b>\$696,436 20</b>	<b>\$759,711 15</b>	<b>\$63,274 95</b>	
<b>Leaving a balance of.....</b>	<b>\$1,273,281 98</b>	<b>\$828,807 02</b>	<b>\$444,474 96</b>	

\*NOTE.—Out of the above balance of \$828,807 02 there will be paid on November 15, 1893, the dividend on the Common Stock for the six months ended June 30, 1893, \$624,922.50.



## GROSS EARNINGS, EXPENSES AND NET EARNINGS OF EACH DIVISION.

The following table shows the gross earnings, the expenses and the net earnings of the Main Line and Branches and each Division of the System for the year ended June 30, 1893, with comparison for the year ended June 30, 1892:

	Gross Earnings.		Expenses.		Net Earnings.	
	1892.	1893.	1892.	1893.	1892.	1893.
MAIN STEM, including the Main Stem and Branches; also the Washington County, Winchester and Potomac, and Winchester and Strasburg Railroads, the Harrison Branch, the South Branch, the Fairmont, Morgantown and Pittsburgh, the State Line, the Confluence and Oakland the Grafton and Belington, and the Baltimore and New York Railroads.....	\$12,505,983.20	\$12,155,766.66	\$8,037,548.90	\$8,062,687.50	\$4,468,434.30	\$4,093,077.86
PARKERSBURG BRANCH.....	859,781.71	827,778.52	699,479.49	632,034.32	160,302.22	195,744.20
WASHINGTON BRANCH.....	727,523.18	769,388.37	549,778.40	555,851.75	177,744.78	213,536.62
PHILADELPHIA LINE, embracing the Baltimore and Philadelphia Railroad and Philadelphia Branch.....	1,966,465.95	2,139,325.47	1,389,055.79	1,498,932.58	577,410.16	640,392.89
PITTSBURGH DIVISION, embracing the Pittsburgh and Connellsville Road, the Hickman Run Branch, the Somerset and Cambria Railroad, the Mount Pleasant and Broad Ford and the Fayette County Branches, the Berlin Railroad, and the Ohio and Baltimore Short Line, Eastern Division.....	3,127,780.97	3,209,092.39	2,090,321.26	2,247,521.25	1,037,459.71	961,571.14
WHEELING, PITTSBURGH AND BALTIMORE DIVISION.....	657,479.06	655,395.28	590,445.87	614,769.19	67,033.19	40,627.09
MIDLAND DIVISION.....	349,117.00	372,526.33	315,146.94	337,913.33	33,970.06	34,612.60
CENTRAL OHIO DIVISION.....	1,404,983.16	1,326,853.32	1,154,665.98	1,086,810.17	250,317.18	240,043.35
LAKE ERIE DIVISION.....	1,031,921.89	945,261.62	837,795.30	756,781.91	194,126.59	188,479.71
STRAITSVILLE DIVISION.....	147,551.00	148,544.43	133,724.07	157,373.70	13,826.93	9,170.73
CHICAGO DIVISION.....	2,909,953.15	3,288,085.39	2,400,521.14	2,716,201.58	509,432.01	571,884.01
AKRON DIVISION.....	188,817.39	375,789.07	214,925.17	325,104.27	173,892.22	50,684.80
Totals.....	\$25,877,357.67	\$26,214,807.25	\$18,432,955.97	\$19,041,981.85	\$7,444,401.70	\$7,172,825.40

A comparison of the twelve months ended June 30, 1893, with the twelve months ended June 30, 1892, shows the following:

Increase in gross earnings.....	\$337,449.58 or 1.30 per cent.
Decrease in operating expenses.....	609,025.88 or 3.30 per cent.
Decrease in net earnings.....	271,576.30 or 3.65 per cent.
Increase in earnings from freight.....	180,049.15 or 1.01 per cent.
Increase in earnings from passengers.....	492,795.91 or 8.05 per cent.
Decrease in earnings from freight.....	617,548. or 3.92 per cent.
Decrease in earnings from passengers.....	488,748. or 4.67 per cent.

## TONNAGE OF THE YEAR, WITH COMPARISON.

The increase in the tonnage moved on the entire system is shown by the following statement. The service performed in the twelve months ended June 30, 1893, has been the largest in the history of the Company:

Tons carried in 1884.....	8,629,048	Tons carried in 1889.....	12,161,380
" " " 1885.....	8,423,936	" " " 1890.....	13,988,176
" " " 1886.....	9,807,686	" " " 1891.....	14,858,972
" " " 1887.....	10,572,893	" " " 1892.....	15,738,859
" " " 1888.....	11,195,940	" " " 1893.....	16,356,485

## CONSTRUCTION AND BETTERMENTS.

The aggregate expenditures for construction and betterments for the twelve months have been..... \$2,523,025.20  
For the twelve months ended June 30, 1892, they were..... 1,625,502.17

An increase for the twelve months of 1893 of..... \$ 897,523.03

This sum of \$2,523,025.20 has been charged to the different investment accounts to which the expenditures appertained, the details of which will be found in the General Manager's Report, Table B. It is distributed as follows:

Lines East of Baltimore.....	\$402,863.72
Main Stem and Branches.....	1,064,281.61
Pittsburgh Division.....	633,611.66
Trans-Ohio Division.....	422,268.21
Totals.....	\$2,523,025.20

The Management has deemed it wise to include in operating expenses in the past year, as in the four previous years, a large expenditure made in betterments.

## EQUIPMENT TRUST FOR \$2,000,000.

Of the Equipment Trust Loan, Series B, of \$2,000,000, made with the Finance Company of Pennsylvania, there has been expended \$1,981,530.97 for 42 locomotives, 10 passenger, 3 combination, 4 baggage and 2,945 freight cars, leaving still unexpended on June 30, 1893, \$18,469.03, to be expended for equipment to be constructed.

## SINKING FUNDS.

The company has maintained through the year its cash appropriations to the Sinking Funds of its Sterling Loan due in 1927, and the P. and C. Consolidated Mortgage Loan due in 1926. These two Sinking Funds now amount to \$1,380,292.

The investment for the appropriations and increments of the Main Line Sinking Funds, in pursuance of the agreement to that effect, have been made in the Consolidated Mortgage five per cent. one hundred-year Bonds of this company, and now amount to \$5,055,000 in these Bonds, in addition to \$5,154,304 of other first-class interest bearing Bonds, in the hands of the Trustees of the Main Line Sterling Sinking Funds.

## PAYMENT TO THE CITY OF BALTIMORE ON ACCOUNT OF THE PURCHASE OF ITS INTEREST IN THE PITTSBURGH AND CONNELLSVILLE RAILROAD.

The Company has made its seventeenth annual payment of \$40,000 to the City of Baltimore on account of the purchase of the city's interest in the Pittsburgh & Connellsville Railroad, leaving still due \$30,000 of the original sum of \$1,000,000.

## PAYMENT OF EQUIPMENT TRUST BONDS.

The Equipment Trust obligations of the Company have been issued as follows:

Car Trust of 1887.....	\$2,500,000
Equipment Trust, Series A, 1889.....	1,000,000
Equipment Trust, Series B, 1890.....	2,000,000
Totals.....	\$5,500,000

Ten per cent. of the principal sum is payable annually, and there has been accordingly paid as follows:

The Car Trust Loan of 1887 for \$2,500,000, six annual payments, aggregating.....	\$1,500,000
The Equipment Trust Loan of 1889, Series A, for \$1,000,000, four annual payments.....	400,000
The Equipment Trust Loan of 1890, Series B, for \$2,000,000, two annual payments.....	400,000
Total payments.....	\$2,300,000

## SPECIAL LOANS AND BILLS PAYABLE.

There is an increase of \$165,388.90 under this head, as compared with June 30, 1892, while "Advances for Construction and Permanent Improvement on Lines Leased and Operated" and "Due from O. H. Railroads in General Account" (Table E) show an increase of \$2,049,378.21.

## RELIEF DEPARTMENT.

The report of the Relief Department for the twelve months ended June 30, 1893, will be printed for distribution amongst the members. The following shows the condition of that Department: The active membership at the close of the fiscal year was 22,637, being a decrease of 293 as compared with the previous year.

The receipts and income during the year ended June 30, 1893, have been.....\$ 425,508.32  
And the disbursements have been..... 415,554.39  
From the commencement of the Relief Association to the close of the fiscal year the disbursements have been..... 3,853,949.17

## The amount due depositors by the Savings Feature was:

At the close of the fiscal year of 1892.....	692,547.05
At the close of the fiscal year of 1893.....	830,386.06
The deposits during the fiscal year have been.....	325,049.77
The withdrawals of the depositors during the fiscal year have been.....	188,210.76

## The amount due by borrowers under the provisions of the Savings Feature was:

At the close of the fiscal year, 1892.....	495,178.94
At the close of the fiscal year, 1893.....	601,239.26

An extra dividend of 1 per cent. was declared on all deposits drawing interest at the close of the fiscal year, thus making the interest for the year equivalent to 5 per cent. per annum. The funds of the Savings Feature are loaned only to employees of the Company, to enable them to purchase or improve homesteads or to release liens thereon. At the close of the fiscal year there were 210 names on the Pension roll, the disbursements on this account for the year having been \$31,954.35, and for the whole period \$301,084.16.

## PHILADELPHIA DIVISION.

The business on the Philadelphia Division continues to steadily improve. The following is the result for the twelve months ended June 30, 1893:

Gross Earnings.....	\$2,139,325.47
Expenses.....	1,498,932.58
Net Earnings.....	\$640,392.89

The following is the comparison of the Philadelphia Division for the twelve months ended June 30, 1893, with June 30, 1892:

	1892.	1893.	Increase.
Gross Earnings.....	\$1,966,465.95	\$2,139,325.47	\$172,859.52 or 8.79 per cent.
Expenses.....	1,389,055.79	1,498,932.58	109,876.79 or 7.91 per cent.
Net Earnings.....	\$577,410.16	\$640,392.89	\$62,982.73 or 10.90 per cent.

## STATEN ISLAND RAPID TRANSIT RAILROAD.

The following is the comparison for the 12 months ended June 30, 1893, with June 30, 1892:

	1892.	1893.	Inc.	Dec.
Gross Earnings.....	\$1,046,631.84	\$1,054,031.57	\$7,399.73	
Operating Expenses.....	638,974.55	665,395.18	26,420.63	
Net Earnings.....	\$407,657.29	\$388,636.39		\$19,020.90
Interest, Rentals and Taxes.....	354,848.11	315,243.93		39,604.18
Surplus.....	\$52,809.18	\$43,412.46		\$9,396.72

The extension of the line to the South Shore, referred to in the last report, has been completed and effectively operated since June 1 last.

The completion of the new passenger buildings and freight yards at St. George has been deferred because of the delay in renewing the White Hall ferry lease.

These important improvements will be finished early next summer.

## WEST VIRGINIA AND PITTSBURGH RAILROAD.

The Buckhannon River Branch was completed to the terminus at Pickens September, 1892, and the Main Line to Camden on Gauley in October, 1892, in all one hundred and sixty miles to its connection with the Baltimore and Ohio Railroad at Clarksburg, W. Va.

The traffic from the extensive and valuable timber lands traversed by this line, as well as that from its general trade, is steadily increasing, with the most satisfactory revenue results.

## BALTIMORE BELT RAILROAD.

The completion of this important line, expected early in the past Summer, has been delayed by the legal difficulties in obtaining the Bolton property—the site of the proposed uptown station—and in securing the right of way through some properties beyond that point. These obstacles have so far been removed as to have little doubt the line can be completed by early next Summer. The tunnel is substantially finished, and is a very superior construction. The work yet to be done is in "the open."

## THE PITTSBURGH AND WESTERN RAILWAY.

A through passenger service over this line, the acquisition of which was noted in last Annual Report, was opened in May last between Baltimore and Chicago. It has accomplished a very important and satisfactory service, especially during the Exposition. A portion of this Company's Freight Traffic for the Northwest has been sent by this route since early Spring.

## LANCASTER AND CECIL RAILROAD.

This line, referred to in last Annual Report, was completed and opened for traffic during the year.

## FAIRMONT, MORGANTOWN AND PITTSBURGH AND STATE LINE RAILROADS.

These two roads, extending from the Main Line at Fairmont, West Virginia, to a connection with the Pittsburgh & Connellsville Railroad at Connellsville, Pennsylvania, (through the Fayette County Branch of 13 miles), a distance of 63.30 miles, have been consolidated under the title of "The Fairmont, Morgantown and Pittsburgh Railroad Company."

The line is completed except some bridging, which will be put up in time to open the entire road for traffic by the first of January next.

The line traverses an extensive and valuable coal, lumber and agricultural region, which cannot fail to become a large producer of traffic. In addition to this the road is an important link in a through line to Pittsburgh and the lakes, for the traffic from that valuable section of West Virginia traversed by the connections of the Baltimore and Ohio Railroad.

## WORLD'S COLUMBIAN EXPOSITION.

The arrangements in this connection, referred to in the last Annual Report, have been very effective in handling the Freight and Passenger Traffic of the Company.

The Company's extended exhibit of the "Evolution and Development of the Railway and its Equipment" has been very highly commended.

Propositions have been made the Company to give it as a nucleus of a Railway Museum.

Notwithstanding the extraordinary financial crisis and consequent business depression throughout the country, materially affecting the business of the company, the management has deemed it wise to continue in the past year the large expenditures needed to improve its connections and better the condition of the property in every Department.

In pursuance of this policy there have been expended upon construction alone in the past fiscal year \$2,523,025.20.

And in addition thereto, there has been expended and charged to Operating Expenses during the same period:

In Maintenance of Equipment.....	\$3,383,487.81
In Maintenance of Way.....	3,261,328.93

The revival of business, which may reasonably be expected since the fear of an unsound monetary system has been removed, will, it is believed, fully justify these large expenditures of capital—even during a period of great financial depression—in order to secure ample facilities for an increasing traffic.

In addition to the large payments for Car Trusts, and the payments for Sinking Funds and Dividends on the Preferred Stocks, the Company has declared 5 per cent. Dividend on the Common Stock for the Fiscal Year ending June 30, 1893.

Attention is called to the following tables attached to this Report, which give in detail information connected with the several subjects:

- Earnings and Expenses of all lines East and West of the Ohio River.
- Statement of Net Earnings and Income and Fixed Charges on all lines of the system, together with the profit or loss upon each.
- Statement of Income from sources other than the operation of the Railroad System.
- Statement of Interest Charges, Taxes, Rents, etc.
- General Balance Sheet.
- Profit and Loss.
- Statement of entire Funded Debt of the Baltimore and Ohio Railroad Company's System, including that for account of the Baltimore and Ohio Railroad Company, the Parkersburg Branch Railroad Company, the Philadelphia Branch and the Baltimore and Philadelphia Railroad Company; also the Funded Debt of the Pittsburgh and Connellsville Railroad Company.
- Bonds for which the Company is Guarantor.
- Leases of the Company.
- Profit and Loss, Washington Branch.

The President and Directors take great pleasure in again acknowledging the specially faithful and efficient services of the officers and employees of the Company during the past fiscal year, and they desire to do so particularly in connection with the extraordinary Passenger movements to and from the World's Columbian Exposition.

By order of the Board,

CHARLES F. MAYER, President.

The foregoing Report was unanimously accepted and approved.

The meeting then proceeded to the election of Directors for the ensuing year. The old Board was unanimously re-elected. The vote was 172,463 shares, the largest in the history of the Company. Messrs. George J. Appold, Thos. I. Carey and Gilmore Meredith acted as Judges of Election.

DIRECTORS—Wm. F. Burns, Geo. A. Von Lingon, James Sloan, Jr., Wm. H. Blackford, Aubrey Pearre, George DeB. Keim, Wesley A. Tucker, Maurice Gregg, J. Wilcox Brown, William F. Frick, George C. Jenkins, Charles J. M. Gwinn.